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COMMENTARIES,

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THE GREAT ANTIQUARY

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COMMENTARIES
ON THE
CAUSES, FORMS, SYMPTOMS,
AND
TREATMENT,
MORAL AND MEDICAL,
OF
INSANITY.

By GEORGE MAN BURROWS, M.D.
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON,
ETC. ETC.

LONDON :
THOMAS AND GEORGE UNDERWOOD.

M.DCCC.XXVIII.

COMMENTARIES

BY

CLAUDE, FORMER, RHYTHMUS

AND

TREATMENT

OF THE



INSULT.

BY GEORGE WAIN BUNNONS, M.D.

RECTOR OF THE COLLEGE OF PHYSICIANS IN LONDON

1852

LONDON:

THOMAS AND GEORGE LITTLEWOOD

PRINTED

TO

SIR HENRY HALFORD, BART. K.C.H.

PRESIDENT OF THE ROYAL COLLEGE OF PHYSICIANS,

PHYSICIAN TO THE KING,

&c. &c. &c.

These Commentaries

ARE,

BY HIS PERMISSION,

VERY RESPECTFULLY INSCRIBED,

BY HIS FRIEND AND FAITHFUL SERVANT,

THE AUTHOR.

P R E F A C E.

IT has been said that “ a great book is a great evil;” I fear, therefore, that I have committed more than one offence. For, besides that this book is bulky, it was promised years ago.

In respect to its size, I have nothing to plead in justification but the variety and extent of the subjects which a general view of insanity properly embraces.

I might offer many common-place reasons for the delay; and one has certainly occurred, which not only deprived me of the means of proceeding, but almost induced me wholly to relinquish my intention:—a thief stole my *porte-feuille*, containing all my memoranda, extracts, remarks, &c., and thus divested me in a moment of the labour of years.

However, my former work, entitled, “ An Inquiry into Certain Errors relative to Insanity; and their Consequences, Physical, Moral, and Civil,” being long out of print, and the interest

of the subject greatly increasing, I was influenced once more to attempt the completion of my original design.

As I have no thoughts of publishing another edition of the "Inquiry," I have here embodied such portions of it as are adapted to my present views.

They who first encouraged this undertaking, now that they receive its fruits, will not, I hope, find themselves disappointed. One compensation, at least, will be derived from the delay:—ten years have been added to the author's experience.

Wherever I could, I have referred to the writers whose opinions I have adopted or questioned; but, owing to the depredation alluded to, many authorities which ought to be acknowledged are omitted, and some have been supplied only from memory. If, therefore, I have done injustice to any author, I respectfully claim his indulgence, and the credit of intending to be both honest and candid.

10, *Montague Street, Russell Square,*
July 1828.

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INTRODUCTION.

THE origin of many existing diseases, as well as of others now extinct, may be traced to very remote periods; and their progress and influence on humanity have proved objects of curious and instructive research. But none claim such high antiquity as insanity, which, having its source in the moral as well as the physical qualities of man, is coeval with his creation.

Fiction has invested the primeval race with all the attributes of purity and innocence: but sacred tradition records, that man was ever the slave of his passions. Excess of passion is designated a short madness; and what else was the act of the fratricide Cain, the first-born?

Madness is one of the curses imposed by the wrath of the ALMIGHTY on his people for their sins; and deliverance from it is not the least of the miracles performed by CHRIST. Saul was mad, and was cured of melancholia by the music of David's harp; and it is evident that insanity was then of common occurrence, since David himself, when beset by his enemies, "changed his behaviour before them, and feigned himself *mad*."

The first notice of insanity as a disease traces it to the era of fable; yet the cure of the daughters of Proteus by Melampus, through the means of hellebore, bears too many marks of consistency to be a mere fiction.

When the light of philosophy first broke in upon the universal ignorance and superstition which reigned, one of the first objects of study was man. That he was

imbued with a distinctive faculty or faculties above all other animals, was a self-evident fact; and what was the nature and seat of this faculty, which we denominate mind, became, instinctively, an inquiry among natural philosophers.

To trace all the theories to which this fruitful source of speculation led, would be to push research into the mystical recesses of Egyptian mythology and metaphysics. Had these philosophers been satisfied to confine their investigations, as Dugald Stewart observes,* to ascertain the laws of our constitution, as far as they can be discovered by attention to the subjects of our consciousness, and afterwards to apply these laws as principles for the synthetical explanation of the more complicated phenomena of the understanding,—they would have done wisely, and attained all the knowledge of the human mind permitted us. This is the philosophy which Hippocrates contemplated, and which, when combined with the other qualities, gave the character of DIVINE to the medical art.

Unfortunately, the fascinations of speculative philosophy prevailed, and hypothesis superseded induction. The physician and the metaphysician forgot that the proper study of man is man; and that he who aims at the most perfect knowledge of the human mind must study human nature, not by scholastic rules, but by the realities of life. In truth, to acquire this knowledge, we must first “unlearn the errors of the crowd, and the pretended wisdom of the schools.” The errors of the crowd, indeed, obtain for a time, and pass away; but the dogmas of the schools are more dangerous, because, sanctioned by such authority, they are embraced unexamined, and perpetuated.

Philosophers of every age, who have made the human

* Philosophical Essays.

mind the subject of abstract study, and who set so high an estimate on human genius, must have been struck with awe and wonder in beholding the frequent subversions of this, the DIVINE attribute of their species. To speculate, therefore, on the nature of the mind, and the morbid phenomena of intellectual derangement, was a natural consequence.

In pursuing their inquiries, however, the ancients plunged so deeply into the mysticism of metaphysics, that they lost sight of the true object of their research. The dogma, that the soul or mind was a divine and divisible principle, governing and directing the intellectual faculties, but independent of organic matter, or, in other words, the body — fascinated and absorbed their whole attention. The opinions thence imbibed have descended through intervening ages, were revived with renewed ardour in the seventeenth and eighteenth centuries; and still, in the nineteenth, exercise a controlling influence.

The effect has been, to consider mental derangement not as a disease connected with the grosser or corporeal part of man, and within the province of medicine; but as a subject of abstract contemplation.

Cicero, an acute observer, remarked, that the nature of the human mind was too subtle for our weak perceptions to discover.* Of its disorders, “the absolute source, if ever fully developed,” says Bacon, “will be found to exist in corporeal changes, or the effects of external agents acting on the gross machine, and not primarily on the immaterial principle, as has, unfortunately for the subjects of disease, been too commonly apprehended.”†

Notwithstanding this great authority, which points out the true and only mode of investigating the causes of insanity, viz. to study its phenomena in the living,

* Tusc. Disput. lib. i.

† Novum Organon.

and to seek them by anatomical inspection in the dead ; yet was the latter essential mode of investigation neglected in this country for nearly two centuries after the decease of this profound natural philosopher.

Some eminent foreign pathologists, despising all metaphysical speculations, boldly sought the causes of insanity in the morbid dissection of the bodies of those who had died insane.

Although their good sense thus rejected idle hypothesis, yet the danger of oppugning the doctrine of immateriality seems to have superseded the results of their anatomical discoveries : and most probably we may assign this as a reason why each author blindly followed his predecessor when treating of the causes of insanity ; and why no work worthy of notice has been published by the moderns upon this malady till within these thirty years.

Were it not for some such influence, whence comes it that the dissections of Bonnetus, Morgagni, Meckel, &c., which prove beyond dispute that morbid appearances are almost always detected in the brains of maniacs, and which long since were collated by that celebrated physiologist Haller, were so little regarded ?

Medicine ever was, and ever will be, a conjectural science. Hence the aptitude in physicians to enter into controversial discussions on points purely speculative. Yet it is impossible to withhold either astonishment or regret, that, since the revival of learning, so many should have so far forgotten the principles and precepts of the great father of physic, and the very end and object of their profession, as to have wasted their time in discussions on a subject so abstruse, so purely metaphysical, as the nature and seat of the intelligent soul or mind.

All the theories, it has been wisely observed, which have yet been offered by physiologists on this subject,

are entirely unsupported by proof; and, what is worse, are of such a kind, that it is neither possible to confirm, nor to refute them by an appeal to experiment or observation.*

Have we arrived at that perfection in physiology—that science which implies “a knowledge of the qualities and order of the phenomena of the body in a state of health;” or in pathology, which signifies a similar knowledge “of the animal body in the state of disease or death,” as to justify an expectation, that human inquiries will ever elicit a knowledge of the nature and principles of the soul or mind, which governs and animates man?

Let us be content, instead of seeking its essence, to analyse the operations of the mind in health, and to endeavour to unfold the causes which influence those operations to the injury and derangement of its functions.

Although a taste for studying the philosophy of the mind has been ardently cultivated by such eminent men as Bacon, Locke, Berkely, Reid, Stewart, &c., yet this subject belongs rather to ideology than to physiology. The sphere of knowledge would be more usefully extended were this study principally confined to the natural history of the mind.

But it has been contended, that this knowledge is indispensable to the treatment of mental derangement. That it will tend to correct the infirmities and erroneous perceptions of the mind, must be conceded; and that a physician thus qualified will prescribe with greater success in all diseases where reasoning can have effect, is clear. But reasoning is a remedy rarely admissible with the insane.

The philosophy of the mind is rather suited for the purposes of instruction, to guide the impressions and associations of early life, and to prevent or refute

* Stewart's Preliminary Diss. to Philos. Essays.

error. It may do more; it may prepossess the mind with those truths which ensure it most effectually from the reception of error. The aim and use, therefore, of this study is, the improvement of man; to teach him how to avoid those causes which expose him to error, and how best to surmount their effects. It leads likewise to the knowledge of human character; and consequently it relates more intimately to the prevention than the treatment of insanity.

The precepts of the schools, when attempted to be applied, unaided by experience or medical science, will never succeed in restoring an insane mind to sanity. Here the philosopher must yield to the tactician, who derives his observations from practical views of human nature as it exists with all its infirmities, and who prescribes his remedies according to the rules of worldly experience.

I will not say with an ancient author, *ubi philosophia desinit, ibi medicina incipit*; but I strongly deprecate the impression, that none but philosophers can cure intellectual derangement.

He, however, who has acquired that knowledge which has been quaintly termed “the anatomy of the mind,” will ever possess a great advantage; for the shades between sanity and insanity are sometimes so faint and indistinct, that it requires superior sagacity to discriminate between them.

Pinel* reflects upon English writers on insanity for vagueness of description, attachment to scholastic distinctions, and for mere compilations intermingled with a few scattered facts which serve as rallying points, but have not the authority which multiplied observations only offer for regular inferences. These remarks he aims still more forcibly at the Germans, excepting only Greding.

* *Traité sur l'Aliénation Mentale*, edit. 2.

He justly concludes, that all the speculative writings on the analysis of the human understanding, have contributed nothing to elucidate its disorders.

Some, instead of studying the phenomena of corporeal disease or morbid actions in the insane, have suffered their attention to be led astray by psychological disquisitions, German mystifications, and Bedlam sketches. Though well calculated to gratify a romantic and prurient taste, such productions have tended, in a lamentable degree, to divert inquiry from the real character of insanity. It is holding up the shadow only, while the substance eludes observation.

Such persons imagine, that inquiry into the state of a patient who is insane should have reference only to the mental symptoms, and that these are to be examined in the same way as a clinical examination of the symptoms of bodily diseases. By this means, they contend, we may penetrate that internal disorganization of the understanding whence the aberration originates; and that, by tracing it to its source, the mental process by which it was formed may be ascertained. Then the science of reasoning or logic being the proper remedy, a cure will be thus effected.

They who argue thus, know little of the matter. The attempt at treating an insane person in this manner, would end in aggravation of the patient's state, and in certain disappointment and regret to themselves.

In reference to the difficulties attending the study of this malady, Dr. Ferriar observes, that Nature, as if in ridicule of the attempts to unmask her, has reconciled contradictions and realised improbabilities with a mysterious versatility, which inspires the true philosopher with diffidence, and reduces the systematic to despair.* Fortunately, however, the ardour of inquiry has not been

* Medical Hist. and Reflect. vol. ii.

checked by this opinion, though it may have been rendered more cautious. Philosophy and medical science have persisted in the attempt to unveil the mystery; and the systematic have not omitted their efforts to reduce the multiplied and versatile forms of this malady into order; but with what degree of success remains to be proved.

The proximate cause of mental derangement can never be known, till the nature and essence of mind be unveiled to mortal view,—a knowledge equally hidden with that of life itself, and which it is, perhaps, best for human happiness should for ever be concealed.

That the operations of the mind are wonderfully influenced by our corporeal movements, cannot be doubted; and that the influence is reciprocal, so that when the former are disturbed the latter sympathise, is clear.

The moral causes which produce these physical effects, have been ably discussed by many authors. Indeed, the consideration of them cannot be overlooked by those who wish to be acquainted with the remote sources of disordered intellect.

But I think the various phenomena which insanity presents have not been sufficiently studied, either in concurrence or sequence, or in relation to or combination with, other cerebral affections.

Impressed with this opinion, and that a more careful examination of the causes, both moral and physical, as well as of the various morbid affections in connexion with mental derangement, will lead to a clearer view of the pathology of insanity, I have ventured into a wider field of investigation.

I pretend not to any discoveries, nor even to novelty; but to have collated facts, and attempted so to arrange them, that the treatment of this malady may be established on principles of induction, and not solely on hypothesis.

PART I.

COMMENTARY I.

MORAL CAUSES.

THE moderns divide the causes of insanity into moral and physical.

Every impression on the sensorium, through the external senses, and every passion in excess, may become a moral cause of insanity. Thus all, however opposite, act as exciting causes, and will produce this result: joy and grief, anger and pain, love and hatred, courage and fear, temperance and ebriety, repletion and inanition, application and indolence, may have the same effect. Vices, also, which occasion changes in the physical constitution, act as remote moral causes, and induce mental derangement.

All impressions that affect the feelings are conveyed to the sensorium, and operate according to the degree of constitutional susceptibility, and the nature and force of the impression. The action of the heart is correspondent with this impression, and re-acts on the brain and nervous system. Hence there are two impressions: the one primitive, affecting the sensorium; the other, consecutive, but simultaneously affecting the heart. Thus the nervous and vascular systems are both implicated; and in this manner moral impressions become causes of insanity. The moral cause, therefore, is always the remote cause; the physical, the proximate, or that state of the cerebral

functions which immediately precedes the peculiar action denominated maniacal.

The influence of the passions on the operations of the mind is a subject which, to be examined as it merits, demands “the eye of a natural historian, and the spirit and impartiality of a philosopher.” No author has discussed it with greater ability than Sir Alex. Crichton.*

The effect of intense emotions or passions, often repeated or long continued, not only disturbs the functions, but will occasion lesions of the brain. It is easy, says this author, to conceive, that an affection or change of structure of this organ does occur from an external impression being communicated to it by the nerves; but the effect on the mind produced by this impression on the brain, is what we cannot explain.

Many structural and functional diseases, which are ascribed to physical causes only, may be clearly traced to emotions of the mind.

Thus the heart, stomach, liver, intestines, kidneys, &c. are often violently acted upon by external impressions; but the effect is modified or altered, according to the force of the exciting cause, or the temperament of the person acted upon; and it commonly ceases with the cause that gave rise to it.

The views of the ancients respecting the causes of insanity were principally confined to proximate. The numerous predisposing moral causes of morbid excitement they wholly excluded; and of mechanical causes, produced by mal-conformation of the bones of the cranium, &c. they were ignorant. They placed the seat of the passions in the præcordia, because thereabouts a certain feeling is always produced when any strong emotion, such as joy, grief, pleasure, pain, &c. is experienced. They

* An Inquiry into the Nature and Origin of Mental Derangement, 1798.

even assigned particular passions to different viscera: courage was placed in the heart, anger in the liver, joy in the spleen, &c. Bacon, with Van Helmont, seated the affective passions in the stomach; Lecat, in the nervous plexuses; and others in the ganglia of the great sympathetic nerve. Richerand says, maternal love has its source in the bowels, that thence it springs, and all the efforts of imagination cannot impart that feeling to those who have not been mothers. Whence, then, it may be asked, has paternal love its source?

Reid placed the seat both of the affections and passions in the nerves. Lacaze, Bordeu, and Buffon, &c. have endeavoured to deprive the brain of the nobler portion of those faculties ascribed to it, and to transfer them to the epigastric region, which they considered the primitive seat of action of the moral affections, whence they were radiated by the nervous influence to remote parts. Hence they imparted to the word, heart, a physical and intellectual meaning, though heretofore used only when expressing a moral impression. This centre was with them, as with the ancients, the agent, or rather the seat of the internal man.

Stahl offers many excellent observations on the influence of moral causes on the corporeal system; but, in opposition to the mechanic philosophers, theorises, and ascribes the crises of diseases, and the expulsion of morbid matter, to the *animo rationali*; the latter having assigned these operations to the simple effect of the mechanic laws, without the intervention of the mind. Engaged in this controversy, Stahl, however, makes few remarks which elucidate the effects of moral causes on the mind.

Many physiologists persist in the ancient belief, that each viscus has an independent sense; though so obscure, that it was scarcely possible to refer any one to a particular site. Hence the Germans have supposed there

might be a sixth sense, and the seat of it they placed in the extremities of all the nerves of the body, except those which supply the organs of the five external senses. Were such indications of visceral sensibility proved, there would be a ready solution of the nature of those sympathetic affections which are now so mysterious and perplexing.

In those of a nervous temperament, the modifications of feeling, as well as of the passions, are most varied; and these should be studied, as being more or less indicative of the maniacal constitution.

Bichât says, “Physicians have not sufficiently distinguished passions and sensations. The former have connexion with exterior objects, and give birth to the latter, which are therefore mere agents, and communicate, as conductors, the cause, but participate not in the effect. Every kind of impression has its centre in the brain; for all sensations imply impression and perception. Thus, the senses receive the impression, and the brain perceives it; and as the impression quits this organ, its action is suspended, and sensation ceases. On the contrary, the brain is never affected from the passions; but when excited, the internal organs of life are the only seat of them.”* It is not, however, always possible to distinguish passions from sensations.

Modesty, which cannot be considered a passion, but a sensation, betrays itself by a simple blush, and ceases with its exciting cause. The suffusion of shame is deeper: the blood is here retained, in a peculiar manner, in the capillary vessels, as if the veins were constricted. This sensation will suppress the menses, or other secretions, has occasioned insanity, and in some instances has even produced death.† Esquirol mentions, that he attended a lady, who became insane on the wedding-night,

* *Recherches Physiol.*

† *Haller's Physiol. Aph. 565.*

from shame on sleeping with a man; and also another, who loved her husband to excess, yet was deranged at the nuptial approach.*

Diffidence, which is another modification of modesty, has also induced mental derangement. Cowper, the poet, from the apprehension of not being able to execute properly a very simple and honourable, but public duty, became melancholic.† Indeed, the early life of this amiable man, as described by himself, is a complete illustration of the effects of morbid sensibility.

Terror and horror produce similar effects on the system, and insanity may supervene on either. Here, instead of the heart re-acting with increased momentum, the returning venous blood is detracted from the extreme vessels, as is evinced by a death-like paleness; the motion of the heart becomes embarrassed, a violent struggle ensues, and the organ may cease to beat, or be ruptured. If re-action take place, it is generally so violent that the functions of the brain are overwhelmed by the force of the propelled blood into its vessels.

The effects of anger and fear on the heart and circulation are opposite: the one impels more blood to the brain, and stimulates the nervous power; the other depresses and enfeebles the action of the heart, diminishes the quantum of blood flowing to the brain, and deteriorates the nervous power. So, likewise, in respect to muscular power; anger immensely augments, fear paralyzes it.

Anger, also, affects the circulation diversely: sometimes, the blood rushes to the capillaries, and reddens the surface; sometimes it is the reverse, and the surface is perfectly blanched. But mania or apoplexy may be produced either way; from the effect of sudden in-

* Dict. des Scien. Méd., Art. *Folie*. † Hayley's Life of Cowper.

creased momentum, or from the afflux of blood by re-action after a partial collapse of the emptied vessels.

Dr. Parry says, he has seen all the symptoms of incipient fever removed in a few seconds by the mere operation of fear.* A sudden and strong emotion will check the course of incipient insanity, as it will of other diseases. Fear will check, as well as cause insanity. So especially will terror. It is by producing the latter impression, and the consequent re-action, that the bath of surprise has sometimes cured mania; but the re-action has been occasionally so powerful as to destroy the equilibrium between the nervous and vascular systems, and fatuity or apoplexy has followed.

Terror is analogous, in its ultimate effects on the nervous system, to anger and courage. It will stimulate extraordinary efforts for self-preservation, far exceeding the natural strength; but when the occasion which excited the effort ceases, the consequence may subvert the mind. A British naval officer had an intrigue with the wife of a native of Monte Video. Coming from his rendezvous one night, he was attacked by assassins. He was a man of great strength and tried courage, and defended himself so strenuously, that he escaped unhurt, and took refuge in a place of safety. But while in this place, he was almost immediately afterwards seized with furious mania. In this condition he was sent to England. He recovered, and was restored to the service; and although he afterwards served many years in a torrid clime, he experienced no recurrence of insanity. Insanity from sudden fright, however, is generally cured with difficulty; especially if it produce menstrual obstructions, which from this cause are always obstinate.

The secretions and excretions are singularly affected

* Elements of Pathology and Therapeutics, 1815.

by fright. Hufeland relates a striking instance occurring in the practice of Dr. Tourtual, of Munster: a mother was so agitated by fright, that, upon afterwards suckling her infant, and its quitting the nipple, it exhibited symptoms of great inquietude, and died in its mother's arms. This, he concludes, was occasioned by the milk being so changed as to operate as a quick poison.

The tendency of excessive grief to induce determination of blood to the brain, and consequent madness, is too familiar to need illustration.

Joy, however, is more likely to occasion sudden insanity than grief,—because the former cannot, like the latter, find relief in tears; and tears are the natural solution of cerebral congestion and excitation. If intense grief do not find this natural vent for increased cerebral excitement, mental derangement, especially with propensity to suicide, is a frequent consequence.

Sudden transitions from joy to grief occasion the greatest shocks to the feelings, and produce the most durable effects on the mind.

Joyous impressions, Esquirol says, are rarely the cause of insanity; and he adds, it is singular that the excess of joy, which will destroy life, never deprives of reason; whilst trouble and chagrin provoke so often the loss of it. This author thinks Mead mistaken in supposing he has seen cases in England of persons suddenly enriched becoming insane; and believes that such an effect has arisen because they have quitted their former habits, or that their riches being the fruit of some hazardous speculation, an inquietude dangerous to their health or peace of mind has resulted; and that when insanity has immediately succeeded an unexpected access of fortune, such effect was produced by the fear of losing it, rather than by the sudden possession of it.

This is surely a gratuitous assumption. I have met with but two instances of mental derangement from

excessive joy. One was in a young man of humble expectations, who had an unexpected fortune bequeathed to him. He was of Scotch birth, and had received an excellent education; but he certainly never possessed a strong mind. Ten years have nearly passed; and though improved, he has never recovered his former intellectual faculties.

Assuredly, no impression is more calculated to subvert ordinary minds than the sudden and unexpected influx of great wealth. When thus acquired, many become deranged from being elevated to a sphere for which they were never intended; and previous education furnishing no other resources, *ennui* and *tædium vitæ* follow. Many such, abounding in riches, fancy they will live to want common necessities; but I never knew one become insane from the apprehension of losing his fortune again.

Actual losses, or disappointments in pecuniary speculations, do not appear to occasion insanity so frequently as unexpected or immense wealth. In the six months succeeding the extensive failures, and consequent distress, of the winter of 1825-6, in this metropolis, there were fewer returns of insane persons in the London district than in any corresponding period for many years past.*

Particular passions exercise distinct effects on the corporeal functions: desire produces an increase of the seminal secretion; the smell, or even the expectation of savoury food, excites the salivary glands; maternal feeling, the secretion of milk; and dislike, both in the human and brute creation, prevents the flow of it; fear incites the intestines, kidneys, and skin, by diarrhœa, incontinence of urine, and sweat; grief, the stomach and lachrymal ducts; anger, the liver; terror, the nerves, inducing palsy; extreme hope, the respiration.

* This curious fact I state upon the authority of Dr. J. Bright, Secretary to the Commissioners for licensing Houses for the Reception of Lunatics.

The spontaneous separation of warts, by what is termed charming them, is an instance of the influence of the mind on the body.

The rapid change of the natural colour of the hair to white, is another instance.

Change of temperature of the body is produced by the passions: lust increases heat, aversion or fear occasions cold.

The mental affection known as nostalgia, or an intense desire to return to one's native country, is a disease purely arising from a moral source; but it produces a positive organic lesion,—for Avenbrugger says, that on dissecting the bodies of those who have died of it, the lungs are always found adhering firmly to the pleura, &c.

Corvisart describes* a mental affection which he pronounces to be unnoticed, as being little known, yet actually often existing; and the effects of which are analogous to those of nostalgia. He denominates it “infant jealousy.” This pathologist minutely describes the attendant symptoms in a girl of about three years old, all of which he conceives to be the effects of a profound moral affection. She recovered in consequence of his discovering the real nature of the case; but had she died, he believed he should have found some organic lesion of the lungs or the heart. Making due allowance for Corvisart's pathological bias, I know not why the mind even of a child may not be strongly affected by a moral impression, and her bodily health sympathise with it.

The heart being responsive to all impressions on the sensorium, its functions are proportionably excited. If the impression be often repeated, the organ itself takes on a morbid action, and becomes at length disorganised.

The physical effect produced on the circulation by a

* Comment. sur Avenbrugger.

powerful moral impression, cannot be better described than in the language of a modern novelist:—

“ Every word had been torture; I felt the blood rush in volumes to my head, and my temples throb almost to bursting; and then, by a sudden revulsion, it was again thrown back upon my heart, and lay a load upon my life-springs.”

Hence it appears, that all the passions, and every emotion which powerfully acts on the sensorium, rank among the moral causes, and become accessory to the physical causes of insanity.

But many of the causes inducing intellectual derangement, and which are called moral, have their origin not in individual passions or feelings, but in the state of society at large; and the more artificial, *i. e.* civilised, society is, the more do these causes multiply and extensively operate. The vices of civilisation, of course, most conduce to their increase; but even the moral virtues, religion, politics, nay philosophy itself, and all the best feelings of our nature, if too enthusiastically incited, class among the causes producing intellectual disorders. The circumstances influencing their occurrence are to be sought in all the various relations of life, in constitutional propensities, and, above all, perhaps, in education.

The upper classes, who are supposed to be most subject to maladies of the nervous system, have also been deemed almost exclusively liable to insanity. This, however, is a vulgar error, which an inspection of any of the pauper asylums for the insane instantly refutes. Habitual luxury, and the vices of refinement, are peculiar to the rich; and, consequently, a greater degree of susceptibility and irritability is superinduced. The lower orders, who ought more generally to be exempt from the concomitant of wealth and indolence, that is, disease, unhappily provoke it by their excesses; and

thus voluntarily ingraft on themselves the evils which, from their condition, they might otherwise escape.

If, therefore, the nervous system be immediately acted upon, through greater susceptibility in the upper classes, from luxury, an equal susceptibility to morbid affections of the viscera is induced in the lower classes, though more slowly and remotely, from intemperance.

The moral causes of insanity will naturally affect the rich and educated differently to the poor and uneducated. Indeed it will be found, that the former, with the exception of hereditary insanity, are most frequently deranged from affective or moral causes, while the latter are principally so from physical causes.

Extensive as I conceive the influence is of moral causes in the production of insanity, I cannot assign it so wide a scope as many foreign writers.

I entertain very strong doubts of the fidelity of the catalogue of moral causes which they enumerate with so much affectation of minute accuracy. For, although very inquisitive on this point in every case on which I am consulted, yet it very frequently happens, that I can trace no moral cause at all. The majority originate in direct physical causes, which the privations and consequent misery, the poor suffer in all countries, as well as their vices, greatly multiply.

A recent English author, going to the other extreme, asserts, that he never could trace, in several hundred cases, more than one originating in a moral cause. The necessary inference is, that he could have made no inquiry.

Different professions, occupations, and trades, have been supposed to exercise a greater moral influence in inducing insanity than others. Hence the French Registers* embrace a most extensive list of them, and the

* *Compte rendu des Hospices des Aliénés*, 1826.

number of insane of each calling. But this evidence, I repeat, is too vague to afford any conclusion.

Insanity bears always a striking relation to public events. Great political or civil revolutions in states are always productive of great enthusiasm in the people, and correspondent vicissitudes in their moral condition; and as all extremes in society are exciting causes, it will occur, that in proportion as the feelings are acted upon, so will insanity be more or less frequent.

Accordingly, Pinel has observed, how common mental alienation was in France, from the effects of the revolution; and Dr. Hallaran remarked the same, as the effect of the last rebellion in Ireland.* Rush has given many striking examples of the influence of the American revolution on the human body and mind. He says, enthusiasm at the beginning of a battle excited, both in officers and men, great thirst, though no exertion had been used; and at the first onset, even in the severest cold, a glow of heat was perceptible in both ears. Soldiers were found dead on the field at the battle of Monmouth, without any sign of wound, injury, or exhaustion: he therefore supposes they died from emotions of the mind. Many diseases, before scarcely ever seen, were prevalent among the Americans upon the sudden cessation of the war. These affections were so frequent among the royalists, that Rush gave them the specific name of "*Revolutiana*," and they bore the character of despondency; to the species of insanity pervading the revolutionists, that of "*Anarchia*," bearing an opposite character. The scenes that were passing suspended in the women hysterical and different complaints, and produced many others.† Similar effects on the female sex were observed during the rebellion in Scotland, in 1745. The siege of Paris by the Allies, in

* Pract. Observ. on the Causes and Cure of Insanity, 1818.

† Medic. Inquir. and Observ.

1814, occasioned in the female inhabitants much irregularity in the menstrual flux; and apoplexy and mania were more generally frequent. All these are truly moral or affective causes, inducing changes in the corporeal system, through the nervous influence.

As the multiplication of moral causes is co-relative with the degree and progress of civilisation, it might be inferred, that savage nations are exempt from insanity—the curse of polished life. Rush asserts, that it is unknown among the North American Indians, and the infrequency of it has been noticed among those of South America. But the more remote and savage, the less likely are the natural habits to be ascertained; and hence I suspect some fallacy in this conclusion.

The passions of barbarians are always strong, and sometimes furious; and most evince that their affections are violent. Their organisation is the same as the more civilised; and when such people become contaminated by association, they contract the same diseases. Why, therefore, should it be imagined savages never go mad?

The natives of the Indian peninsula, who are far more temperate in diet, and have their passions much more under control, are yet very prone to insanity; and several asylums are now established in the different presidencies for their reception. It is true, they are more civilised than the American aborigines; but if civilisation bring not with it the wants, and vices, and consequent diseases, of Europeans, the exciting causes of mental derangement among the Peninsular Indians appear to be inadequate to produce this physical effect. As they are, indubitably, a very ancient race, hereditary predisposition probably exercises a considerable influence upon them.

Most savage tribes, when one of their community exhibits signs of madness, would no more hesitate to destroy that individual, or leave him to perish, than they

do their aged parents, or the sick and helpless who cannot accompany them in their migrations. Turnbull, in his voyage, relates, that a native woman of one of the South Sea islands, having had her child taken from her, to make a sacrifice to a barbarous idol, went mad; and in consequence becoming very troublesome, her countrymen killed her. Such practices readily explain, why lunatics are not seen among savages.

Moral philosophers love to theorise on the passive virtues of unsophisticated aborigines, and fancy them as void of vice as the fabulous race who adorned the golden age,

——— “When man, yet new,
No rule but uncorrupted reason knew.”

Viewing man, however, as he really is, wherever he inhabits, I judge him to be always so much the slave of his passions, as to be liable, among other ills, to insanity.

All emotions of the mind, it is evident, are capable of disturbing the corporeal functions; and though in themselves moral causes, they become physical in their operation. Hence physical causes grow out of moral causes, and these frequently lead to insanity; not, however, by direct impressions on the organ of the mind, but through the means of those morbid changes in the system which they gradually effect.

Habitual drunkenness is a moral lesion, productive among the common people of the larger number of the insane. Excessive venery is another fruitful source. So, in fact, in peculiar constitutions, is indulgence to excess in any sensual pleasure. A certain solitary vice, which youth are so apt to contract through bad example, is a moral vice, and wide-spreading cause of insanity, in its worst form — fatuity, and even idiotcy. Tissot has fearfully depicted the progress of the consequences of this

odious practice ; and those who are unhappily addicted to it, will do well to consult this author's work. They will there read a picture that must, if any sense be retained, check this unnatural propensity, ere it has actually brought on mental alienation.

Could we imagine a human being void of all feeling, moral or religious, mental derangement is not there to be expected through a moral cause. But even where reason is wanting, instinct prevails ; and brutes have their passions, which, when excited to excess, or thwarted, produce madness.

COMMENTARY II.

RELIGION IN REFERENCE TO INSANITY.

It has been disputed whether religion should be considered as a cause or an effect of insanity; but the question has never been fairly mooted. In truth, religion, in connexion with mental derangement, has ever been viewed as a question not less delicate to discuss, than difficult to solve. Hence, perhaps, due inquiry has been deterred — a circumstance deeply to be lamented; for since it will be generally acknowledged that all earthly happiness mainly depends on religion, nothing, it may be conceived, so strongly influences the mental affections.

Polemics, indeed, are not the province of a physician; nor is it my intention to enter the lists: but on a subject like the present, involving an important moral and medical theorem, a candid judgment, unawed by consequences, is called for. Possessing opportunities of observing the phenomena exhibited in intellectual disorders, he would deserve censure who omitted to regard them with attention, and trace their sources and relations. Having had this advantage, and, I trust, not neglected it, I shall presume to offer my undisguised sentiments.

Although I differ with many in opinion, and conceive much error exists on the subject; yet whatever diversity may obtain, all will agree in relation to lunatics, if not to human happiness generally, that it is a question of the utmost interest.

An accurate observer, the Chancellor de l'Hôpital, remarked, that religion has more influence on mankind than all their passions combined. Of this truth, the whole world is an illustration. And as there is no single passion, when excited to excess, that may not induce mental derangement, so we may readily believe, that religion, which influences the internal man more than the passions collectively, may be a cause of insanity. On the other hand, there is no doubt, that a lunatic may imbibe a religious as well as another hallucination, and yet be insane from a cause the reverse of religious. In the one case, however, it is a cause; in the other, an effect.

Now a great source of error seems to arise from the confounding of this necessary distinction.

Medical writers who have derived their chief experience from public practice, are most apt to err in this particular. The previous history of lunatics admitted into public asylums is rarely known; therefore the moral cause of the malady is frequently inferred from the tenour of their mental aberrations; than which nothing can be more deceptive. Hence it is to be feared, that many cases have been hastily attributed to a religious origin, merely because the conduct or conversation of the lunatic has exhibited traits of too vivid spiritual impressions. In private practice the opportunities of obtaining this essential information are superior; and upon a point of such serious importance, I have not omitted to avail myself of them.

Unfortunately, in considering the effects of religion on the moral world, it has been too common for authors to make themselves parties, and impugn opinions, merely because they differed from their own: consequences, therefore, have been ascribed, resting entirely upon gratuitous evidence. This is absolute intolerance; not induction; and when arguments assume this turn, con-

troversy, not conviction, follows. Therefore, it is a want of liberality, and not of delicacy, that has rendered the solution of this subject difficult.

We are bound to make large allowances for the feelings and prepossessions of mankind. And he who has lived and observed, has not now to learn, that the whole human race are sufficiently tenacious in matters of faith; and that nothing opposed to them short of demonstration, will turn the testimony of conscience.

To deny that the mind can, in any condition except of positive alienation, be incapable of appreciating the sublime truths of Revelation, is considered by many as blasphemy; or to admit that Christianity can ever, in those who are sincere, be the occasion of intellectual distraction, has appeared so heterodox, that those who have confessed such a belief, have been accused of absolute scepticism, or the blindest prejudice. Again; some, either in contempt or ignorance, have directly imputed insanity to religion in the abstract.

However natural it may be for a devout person, who experiences all the solace from religion which the genuine practice of the Christian faith never fails to afford, to discredit that it is ever a cause of mental distraction; or for him who teaches that religion is the sole duty of life, to disbelieve that too much enthusiasm can subvert the intellectual system; yet it is clear, that, under certain circumstances, it may be said, insanity is occasioned through the agency of religion. It is not, however, from the agency of the Christian faith, in its pure and intelligible form, but from the perversion of it, that many become the victims of insanity.

But, although this be admitted, there is not a tittle of evidence to substantiate, that Christianity, abstractedly, ever produced that effect. Such accusations are the abortions of infidelity, or of those who lack knowledge. Religion may have been reproached by careless observers.

as the source of mental derangement, because it is often associated with misery; — for affliction induces many earnestly to seek religious consolation, who previously never thought of it, or who but mechanically followed its outward forms. In minds broken down by adversity, and little acquainted with its genuine precepts, a consequence, opposite to that which was sought and expected from religion, sometimes ensues: in this case the moral feelings have greater force than the spiritual, and the disappointment is not the default of the principles of the Christian faith.

Constitutional temperament also interposes, and often distorts the truth; and thus generates an opinion, that melancholic insanity is the effect of religious impressions. Minds so framed view all the blessings of this, or a future life, by involution. Their greatest gratification is persistive despondency. Deaf to precept or example, they retort: —

Go — you may call it madness — folly —
You shall not chase my gloom away;
There's such a charm in melancholy —
I would not, if I could, be gay!

We cannot be surprised if the aberrations of such minds are associated with false notions respecting religion.

In considering the moral causes of insanity, we are too apt to assign those which are probable, and judge accordingly. This is a fruitful source of error; for, in some individuals, the intellectual system is always in such a state of morbid activity, that they, intuitively, “can make a heav'n of hell — a hell of heav'n.” In minds so constituted, the most ordinary incidents become provocatives of derangement; if uncommon or intricate, the more certain and durable is the illusion.

The morbid tendency of Cowper to mental derange-

ment was always counteracted by the consolatory influence of the principles of true religion. In the first paroxysm of his disease, prayer to God afforded a temporary solace to his distractions; and, later in life, the sense of his obligations and duty to his Creator arrested his uplifted hand in the act of suicide.

Religion, it must be acknowledged, is the very essence of humanity. Without it, man has no guide but his passions—no law but his will. Even savages have some notion of a DEITY, or a future state: and although it be not always a GOD of MERCIES that they adore, yet divest them of the sense of a superior and presiding Power, and the character of the people would sustain a material change, and for the worse. What follows, then, when scepticism and infidelity reign, where Christianity once shed its pure and benign influence? The human mind having lost that prop which was its stay in the hour of need, chaos ensues; despair succeeds to hope; and reason, which establishes man's supremacy on earth, is overthrown. Here insanity supervenes on the defect of religion. As a cone inverted, so, we may be assured, is the state of morals where religion has been extinguished; it is a fabric without a foundation; and there insanity will emanate and most exceed.

It has been with some a favourite hypothesis, that insanity frequently originates in the theological tenets peculiar to certain sects; and that persons professing a form of devotion free from controversial intricacies, and therefore such as might be comprehended by the plainest understanding,—as, for instance, that of the Quakers,—would be entirely exonerated from this severe affliction.

If any description of Christians could be supposed to be so favoured, well knowing that all functional derangements are principally excited by the vices and passions of mankind, we might naturally expect it would be the fraternity of Friends, since their's is a profession of

pure morality, of which their lives, commonly, present a consistent illustration. But Tuke's description of the Quaker's Retreat for lunatics, near York, proves that such an inference is a complete sophism.* The avowal of this fact has confounded those who believed that insanity consisted in a "mind diseased;" and has at once levelled those beautiful abstract theories in which they had indulged, and brought them to confess, that between mind and matter there is a connexion and reciprocal re-action. "One touch of nature makes the whole world kin;" and, although some individuals, from a more perfect organization, education, habit, or less exposure to risk, will enjoy greater freedom from disease; yet, be the precepts and practice ever so perfect, no community of persons can be exempt from the infirmities of mortality. All that can be conceded to superior morality, and of this truth I am fully persuaded, is, that the fewest lunatics in all communities will be found among the truly virtuous.

In England, where the mass of the people are piously and morally inclined, and where the liberty of theological discussion and religious worship is tolerated, every variety of schism and sectarism abounds. Consequently, numbers exchange one form of faith for another; and hence the work of proselytism is exceedingly prolific. This, in truth, is the great predisposing cause to what is designated religious madness.

One author avows the obligations of a particular

* The diseases which afflict mankind are chiefly and rightly ascribed to the indulgence of vicious passions; and therefore the moralist assumes that the Quakers must be less liable to corporeal ailments. This may be true in the abstract. But as they almost always intermarry with each other, on this account the proportion of all hereditary affections, among which is insanity, will be found greater in their community than in the population at large. Mr. Tuke informed me, that he computed *one in two hundred* of the society of Friends became deranged.

establishment to *Methodism*; another, in his experience, has had no such evidence. The discrepancy may be accounted for without oppugning the correctness of either. They were placed in situations very dissimilar; the patients coming under their cognizance were as opposite in their natural character and habits, as in religious opinions; and hence their conclusions are at variance. It is possible, however, that there may be more lunatics of the methodistic persuasion than of any other; and for this reason: converts have multiplied relatively with the number and the mental capacity of that class of society to which such doctrines are principally directed. Therefore, in a lunatic asylum appropriated for the relief of the lower orders, there will of course be more of this description of dissenters. But this is no proof that the peculiar doctrine of that sect is the cause of mental disorder.

In whatever nation religion is duly respected, and freedom of opinion and worship tolerated, although there will be found, on the aggregate, fewer lunatics; yet there will be the greatest number, whose malady, if not originating positively in religion, is complicated with religious impressions. In France, where it is too evident that the sense of religion is still very faint, except among old people, we have the authority of Esquirol, that religious fanaticism, which formerly occasioned so much insanity, has almost ceased to have any influence. In more than six hundred lunatics in La Salpêtrière, he discovered only eight; and in three hundred and thirty-seven admitted into his own private asylum, he recognises only one whose malady was supposed to arise from that cause!*

At the epoch of the French revolution, there was a vast accession of lunatics to all the public and private institutions; and among them a great number whose religious feelings had been so outraged, that it was al-

* These observations apply to a period twelve years ago.

leged to be the cause of their malady. At such a crisis, however, when not only religious feeling, but political rights and domestic happiness are all involved, it is impossible to discriminate whether the interests of religion, or of the world, have the most influence on the senses.

Tuke has noted, among the lunatics who have been received into the York Retreat, the same rarity of religious fanaticism which Esquirol has remarked in the Paris establishments. But how different are the reasons! In the former, the opinions and previous habits of the patients, when sane, led them to follow the most simple and irreproachable lives, and nearly all professed one faith: in the latter, the inmates, perhaps, never had any just sense of religion; most were the victims of misfortunes—many of the deepest crimes. Indeed, how can that to which we have always been indifferent, ever be a cause of insanity?

Doubtless, however, the understanding may be disordered by an entire devotion to abstract theology; as it may by intense application to any abstruse subject in morals, physics, or politics. But a religion like Christianity will never so operate, unless it become an object of entire abstraction, or be improperly applied. Neither is there any consecutive connexion between the specific hallucination of a deranged mind, and that which really gave birth to it. Thus the theomaniac may conceit that he is GOD or CHRIST, or that he is in heaven or hell; but it does not follow that he derived such impression from any previous bias. These are simple hallucinations; and it is an equal chance but the individual might have supposed himself a beast, or a bottle, or flying in the air, or walking on the waters.

An unhappy melancholic imagines that he has offended past forgiveness; and will apply passages of sacred Scripture to prove his wickedness, and the impossibility of redemption. But all this may happen without

any particular cause for self-accusation or repentance. These are mere morbid ideas, which spontaneously arise without order or connexion; and are the simple effects of a distempered imagination, which converts visions into realities, and gives identity to shadows.

Neither is it in these enlightened times imputed, it is to be hoped, because a deranged person is a Papist, or a Protestant of the established church, or a sectarian, or even a Pagan, that he is consequently prone to insanity. The tenets entertained and promulgated may be highly dangerous to the happiness of proselytes, though innocuous to those bred in them. Error, till it be known to be such, bears the semblance of truth. Therefore, he who follows with sincerity that form of religion which he has been accustomed to consider as the true one,—till he begin to doubt, is not likely to have either his conscience or understanding disturbed on that account. But if doubt arise, and he questions himself, or is questioned, on points of doctrine which he had cherished as orthodox; he may, in the misgivings which ensue, and in the uncertainty whether the old or new path be the right, unless he have a very strong mind, find himself in interminable perplexity. It is in this state the intellectual faculties are most apt to aberrate. The ideas then become fugacious, the conduct corresponds, and insanity is developed.

Dr. Hallaran, who has had the best opportunities for observation, remarks, that in the Cork Lunatic Asylum, where Catholics are in proportion to Protestants as ten to one, no instance has occurred of mental derangement among the former from religious enthusiasm: but several dissenters from the established church have been so affected. The reason of this difference appears obvious. The ministers of the Romish persuasion will not permit their flocks to be wrought upon. To distrust the fallibility of any point of doctrine or discipline, is with them

heresy. Catholics, therefore, are preserved from those dubitations, which, when once engendered, generally end in conversion. The moment of danger is, when ancient opinions in matters of faith are wavering, or in the novitiate of those recently embraced. And to this danger every Protestant is more particularly exposed; especially in a country where toleration in religious opinions is allowed; for there excess of fervour is the most likely to be awakened.

Enthusiasm and insanity bear such close affinity, that the shades are often too indistinct to define which is one and which the other. Exuberance of zeal on any subject, in some constitutions, soon ripens into madness: but excess of religious enthusiasm, unless tempered by an habitual command over the affective passions, usually and readily degenerates into fanaticism; thence to superstition the transition is in sequence; and permanent delirium too often closes the scene. Enthusiasm and superstition, however, are not necessarily in sequence; for they are as opposite in character as, generally, in effect. The one is almost always the concomitant of genius or a vigorous mind, and may inspire the purest piety or benevolence, or emulate deeds of the highest glory: while the other seldom invades genius, except when extenuated by some corporeal disorder; but is commonly confined to the weak, the timid, and the uninformed; and in them produces either the blindest fury or the most gloomy despondency, and sometimes the wildest schemes for propitiating the offended DEITY.*

* Works on insanity abound in instances of this horrible superstition. Few, perhaps, more clearly expose the source and effect of extravagant fanatic excitation in a weak mind, than the following abridged report of a trial, at Launceston Assizes, April 1824:—

Amy *alias* Emma George, a young woman 19 years of age, was indicted for the murder of her brother, Benjamin George, a child under seven years of age, by strangling him with a silk handkerchief.

Hence I conclude, that there is a preparatory and essential condition of the mind, to which it must be brought, before religion can originate insanity; and that

Samuel Gribble. — I went to see my father, who lived in Mrs. George's house, on the evening of the 4th of March. I heard Frank Hodge's wife scream out that Amy George had hanged her brother. I took the candle from her hand, and went into Amy's room, and there saw the child hanging to a crook in a beam. I went into the room where the prisoner was, and asked her what she had done; she said, "She had hanged her brother for to send him to heaven, and that she would cut her own throat for to go to heaven along with him." She appeared to be in a deranged state. I judged so both from her words and appearance: upon using that expression, she endeavoured to rise from her chair to get a knife, as she was determined, she said, to cut her throat. I with great difficulty kept her back. She repeated, that she would cut her throat, to go to heaven with her brother. I have two sisters; one of them, Mary, was a companion of Amy's, and they attended the meeting-house together. I attend a Methodist meeting; I go preaching sometimes. There is a meeting called the Revivals. There was one of that description at Redruth, six or seven weeks before the boy was hanged. I attended it once, and then I saw several people on their knees, crying to the Lord for mercy, as loud as their voices would let them.

John Cocking, a constable of Redruth, examined. — I sat up with the prisoner at the bar on the night of the 4th of March. About two o'clock in the morning she arose from her bed, and sat down by the fire-side, and we then entered into a conversation, which I began by saying, "Amy, you appear to be a little more composed than you were just now." I asked her if she recollected what she had done. She said she could, and would tell me the whole circumstance, from the beginning to the end. She then told me her mind had been impressed for some time, that she ought to commit a murder; and that on the Monday and Tuesday before she committed the act, her intention was to have murdered her mother; but she endeavoured to banish that idea from her mind, and prayed to the Lord to take the temptation from her. Her mind, she continued, was then a little easier, till the Thursday morning, and then, while she was at work at the mine, the idea came upon her again with greater force than before. In the middle of the day, she went to get her dinner at the boiling-house, where the girls generally dine. After she got to the boiling-house, she recollected that she had

condition is that of doubt as to the orthodoxy of the doctrine professed.

Were the remote cause of insanity, whether marked

seen a little boy, a stranger, standing by the engine-house, near the shaft, or mouth of a pit; and she then regretted that she had not sunk that little boy into the shaft, for then she should have done that which had long been on her mind to do. Returning home in the evening, a little before she came to a Methodist meeting, which stood in a back lane, she saw two children before her, at play, near another shaft, alongside the road; and she then said to herself, "I'll throw one of the little children into the shaft." That the children, in running after each other, came towards her, but she could not get an opportunity of throwing one of them into the mine, as she had designed. Coming nearer to her home, she saw some more children, on which she said to herself, "I'll seize one of these little children, and carry it out, and throw it into a shaft at the back of the houses." She waited some time for an opportunity to take one of them up unperceived; but there were so many persons passing and re-passing, that she could not get one of them away. After waiting for some time about the place, she went to her own house, and found her mother was going to meeting. On going in, her mother said, "Your supper is ready for you, Amy; you can take it, for I am going to meeting, and little Benny will remain at home with you." The prisoner then expressed herself in this way:—"I felt glad I had the opportunity of doing the thing I long wished for—that I was going to be left alone with my little brother, and that my mother was going to be out of the way, so that I should be able to do the deed." She took her supper at the end of the table, and her little brother was sitting at this time before the fire. She gave the child part of her supper, and said to him, "Should you like to go to heaven, dear?" The boy made answer and said, "Yes, when I die." She then rose from the place where she was sitting, and went to a line that was hanging across the room, and took from it a black silk handkerchief, and coming towards the child, put it round his neck, tying it, as she thought, in a running knot. She said to her brother, "Is it too tight, dear?" The child looked up in her face and smiled, and said, "No." She left the handkerchief round his neck, and said, "Go for a drop of water for me, dear;" intending, while the child was gone to a pail in the room, and while his back was towards her, to take him up and hang him to a crook behind the door. The boy was rather quicker than she expected, and she meeting him, took the water from him, drank a little of it, and put the cup on the table.

by religious exaltation or despondency, to be traced, I verily believe that almost all such lunatics would be found converts from their original to a new faith; and

She then took her brother up with one arm, and with the other hand put the handkerchief over the crook, looked him full in the face, and left the room. At this period the prisoner was overpowered by her feelings, and could say no more. About an hour after, there was a second conversation, which I also commenced, by putting a question to this effect—"If you could undo what you have done, do you think you should do it again?" She replied, wringing her hands, "Oh no, no,—the dear little fellow!" I know there are the several shafts which the prisoner spoke of. I am not a member of the Methodist Society; but I have attended a Revival meeting at Redruth, which commenced about three months since. A Revival is termed an "outpouring of the Spirit," and causes the congregation to cry aloud to the Lord for mercy. The Revival continued at Redruth for a month or six weeks. The Revivals are held in the stated places of worship of particular congregations, and sometimes continue open for three nights and days in succession. I have been at a Revival; those who are "convinced of sin," as it is called, fall on their knees, and with uplifted hands, and their bodies working to and fro, call as loud as they are able to the Lord for help. Their ejaculations are such as, "Oh! Christ, pardon me my sins—Oh! Lord, give me grace!" and a variety of other expressions, adopted as the zeal of the moment may suggest. Their conduct was wild and extravagant, and altogether out of the mild and decent course of addressing the Almighty usually observed in places of worship.

By the Court.—It was precisely that kind of strong excitation that was likely to operate on weak minds.

Examination continued.—It is generally called screeching for mercy. There was usually a preacher at the meetings, but not always. The Revival is open by night as well as day. There is no appointment when the Revival is to be held; a congregation may be met, and at prayers, when perhaps some member will fall on his knees and call aloud to Heaven for mercy; when this happens, the other members are generally moved by the same spirit, and the Revival commences. This is called the "outpouring of the Spirit," and continues till the preacher pronounces a benediction, and tells his flock, "the moment of conversion" is come, and they may expect "a ray of hope, of comfort, and joy." The moment of the coming of the "ray of hope" is uncertain, and the congregation continue their extravagant devotions till they are "con-

that the aberration was usually developed during the transition.

Every writer, in expatiating on the exciting causes of

vinced" or "converted." It is about ten years since there was a Revival at Redruth before the late one. The prisoner, in speaking of the child, generally called him the dear little Benny.

The prisoner did not wish to say any thing in her defence.

Mrs. George, the mother of the girl, said, "My daughter attended a Methodist meeting at Redruth for about seven weeks before the death of my boy; she also attended the Revival; I have fetched her home from the Revival. I went for her one night, about half-past 10 o'clock, she having been there from two o'clock in the day. On going to the chapel, I found it extremely crowded. My daughter caught a sight of me, and immediately she lifted up both her arms, as if she was going to fly to the top of the room, and called on her dear mother and father to pray to the Lord to help them, for that they could not see the danger they were in. I got her out of the meeting as soon as I could; but she had lost her cloak, bonnet, handkerchief, and pattens, and was extremely disordered in her dress. She had been moving from one part of the meeting to the other, and, in her unbounded zeal, had dropped her clothes, and they were trodden under foot. My daughter's conduct after attending the Revival was quite different to what it had usually been. This was about seven weeks before the dreadful act was done. On another occasion, she came home praying in a *horrible* manner for the conversion of her father and mother."

The Court.—Explain what you mean by praying in a horrible manner.—I mean violently and outrageously agitated. From the commencement of the Revival, she never missed but one meeting. She also attended prayer meetings and class meetings. Before the death of my son, I apprehended my daughter would do me some violence. On the Monday preceding, she came home, and sat by the fire in a melancholy way, and said, "Mother, I am going out of my mind." I spoke a few words to pacify her, and she went to bed. The next night she said she was better; but she appeared very low. On Wednesday night, on coming home, she said to me, "I am tempted to murder my mother!" I said I was surprised she should think of murdering me; and she said, "I do." After she had said this, she went to the Revival, and returned between 9 and 10. From what she had said, I took the knives and hid them, to prevent her doing mischief to herself, me, or the family. These

insanity, has ascribed a large and direct influence to religion. But they generally impute it, firstly, to the mysticism of the tenets inculcated; secondly, to the intenseness with which abstract theology has been studied or followed; and thirdly, from religion being over-ardently impressed on minds too tender or uninformed to comprehend it. But none seem to advert to that particular state to which the perceptive and reasoning powers are brought, before religion ever induces derangement.

It has been justly remarked, that when once the medium through which we have been accustomed to view the DEITY is impaired, in the endeavour to approach HIM through a new one, the mind is bewildered; we know not where to rest; and, ever dissatisfied, no clear conception is obtained of the real presence of HIM whom we seek. This state is the most dangerous to the human mind; and there is no marvel, if, at such a crisis, the intellects fall into disorder.

The consequences to which this mental condition leads, are admirably portrayed by an eloquent historian, in describing those extravagances which marked the dawn of the Reformation: "When the human mind,"

symptoms I observed on Monday, Tuesday, and Wednesday, and on the Thursday the child was killed.

Mrs. Osborne examined. — I saw the prisoner a week or ten days before the unfortunate affair happened, when she said she had been unwell, and that her illness was in her head; it appeared to her, she said, as if the top part of her head was heaving off; she also said that her brains felt as if they had been turned. She appeared to be in a very wild state, and her eyes were rolling in her head in a very vicious manner. I told her she should not give way to those thoughts, and read some words to her in the Bible, from Genesis, which appeared to make her more comfortable.

Verdict — *Not Guilty*, believing her to be insane at the time.

Vide *The Times*, April 6th, 1824.

says this elegant writer,* “is roused by grand objects and agitated by strong passions, its operations acquire such force, that they are apt to become irregular and extravagant. Upon any great revolution in religion, such irregularities abound most at that particular period, when men, having thrown off the authority of their ancient principles, do not yet fully comprehend the nature, or feel the obligation, of those new tenets which they have embraced. The mind, in that situation, pushing forward with the boldness which prompted it to reject established opinions, and not guided by a clear knowledge of the system substituted in their place, disdains all restraint, and runs into wild notions, which often lead to scandalous and immoral conduct. Such was the effect in the first ages of Christianity, as well as at the era of the Reformation. The renunciation of the ancient faith, and ignorance of that which they had embraced in lieu of it, excited converts to acts more resembling insanity, than of that religion which inculcates the purest morality and the government of our passions.”

The picture here drawn, in characters as bold as just, of the effect of conversion on a multitude, is an exact representation of what occurs in individual cases. In fact, I do not recollect an instance of insanity implying a religious source in any person stedfast to his ancient opinions. Wherever it was suspected to emanate from such a cause, it was clearly to be traced to circumstances which had diverted the lunatic from the authority of primary principles, to the adoption of new tenets, which he had not comprehended, and therefore had misapplied. The maniacal action appeared always to originate during the conflict in deciding between opposite doctrines; and the exacerbation arrived before conviction was determined.

* Robertson's History of Charles V. vol. ii.

But in none of those who had followed their primitive worship to the epoch of their insanity, have I detected a connexion with a religious cause: like any other hallucination, it was merely

“ —— a bolt of nothing — shot at nothing,
Which the brain makes of fumes.”

While the mind is in suspense between the dread of doing wrong in affairs of conscience; and the balance is poised between attachment to long-cherished tenets, and the fear of being excluded from salvation through the medium some new light offers, the feelings are excited to a morbid degree of sensibility and irritability. In such a state, an incident, which, at a period when we are satisfied with ourselves, would pass unheeded, will ignite the latent spark, and inflame the mind even to madness.

A few examples will best illustrate what I conceive to be cases of insanity where religion was the actual agent; but in every one of which it is manifest, that the effect sprung from a perversion of religion, or from the adoption of novel and controversial doctrines, at a juncture when the understanding required the full support of an accepted and credited faith.

EXAMPLE I.

A single lady, about eight and thirty, enjoying good health, naturally of a cheerful temper, and regular in her devotions according to the rules of the established church, went, in the winter, on a visit. The family she visited were followers of Swedenborg. Partly through importunity, and partly from complaisance, she attended their worship, and listened to the doctrines propounded. For the first time, perhaps, she catechised her present opinions: doubts arose; and ere she had renounced her former belief, or had adopted the new, she returned home

to the vicinity of London. She shewed great and unusual disquietude of mind. Easter Sunday following, which was shortly after her return, she accompanied her mother to church. She stopt to receive the sacrament. There were many communicants; and when the chalice was presented to her in turn, upon lifting it to her lips, she perceived that not a single drop of wine was left for her! She was excessively disconcerted and confused, hurried from the altar in dismay, and retired from the church. She declared she was lost; for the emptiness of the cup proved she was rejected of God! A furious paroxysm of mania ensued. It was, however, only temporary; and she, in a short time, regained her former composure.

This lady soon after married, and was happy in the connexion: but has twice since, about Easter, when her mind has been naturally called to the religious duties of that period, fallen into a state of great despondency. She, however, has sustained the affliction of losing her beloved husband with all the fortitude and resignation of a true Christian.

In this case, if the religious principles she had always professed had not been unsettled by the new doctrines she had heard, the casualty that proved the exciting cause of the maniacal paroxysm would have failed of any marked effect.

EXAMPLE II.

A young, unmarried lady, aged twenty-seven, of delicate form, and liable to hysteric affections, but of an exceedingly cheerful disposition, and who had received a plain education, was induced, at the instigation of some over-zealous friends, to believe, though always attentive to her religious duties, that she was not following the

true light. Previously she was happy and content with herself. Suddenly she was brought into communication with some gloomy sectarians. Thenceforth she gradually lost her spirits and health, began to loath herself for supposed sins, and fell into perfect listlessness.

I saw her in this state; and advised that course I thought most likely to remove her bodily complaints, and restore the wonted equanimity of her mind. Unfortunately my advice was not followed in any respect. She became exceedingly wretched and despondent, and could apply herself to no occupation but reading religious books. She imagined herself unworthy of the present, or the life to come. For change of scene, and to obtain such advice as would *reason her* out of her delusions, she went on a visit to a friend's house. There, in succession, ministers of different persuasions were sent to converse with her. Her mind became still more disordered; and she attempted suicide. She was then placed under my care.

Shortly, she shewed signs of amendment, and gradually lost every hallucination. She resumed her original accustomed devotions; and in three or four months returned to her friends. She continued some time well; when, returning to the same scenes, and falling into the same society, she relapsed.

Here was a constitution, both of body and mind, predisposed, on any strong excitement, to aberrate. The suddenness of the change attempted in her religious opinions, as well as in her habits, and the apprehensions thereby induced, by degrees undermined her health, and eventually disordered her understanding. There was no evidence that it was the peculiarity of the new tenets she had been taught that had wrought this change; but it was plain that those fences, which had before been her support, being broken down, her intellects were overwhelmed before any other spiritual prop was established.

Her relapse was a natural consequence of a too early renewal of former associations.

So it ever is with a very young and ardent mind, when religion is endeavoured to be too strongly impressed before the understanding has acquired power to reason on and appreciate the doctrines attempted to be instilled. Although no education can be deemed good, except the principles of piety and morality be inculcated, and are properly exemplified; yet the young and yielding mind should be carefully guarded from encountering points of controversy. If a youth be destined for holy orders, the course of his studies gradually initiates him even into the subtleties of theology, without, probably, any disturbance of his reasoning powers; for if doubt arise, it is perhaps immediately resolved. But when such mysteries are without due preparation enforced, and no clear expounder is at hand, the danger of distraction is imminent.

EXAMPLE III.

A gentleman of fortune, and some consideration, but who had become highly nervous, and somewhat hypochondriacal and gloomy, anxious that his son should be educated with strict principles of religion, placed him under the care of several divines in succession; each of whom was enjoined to be very attentive to his religious instruction. Many of the most abstruse doctrines of theology were pressed upon him. His mind, consequently, became perfectly bewildered and enfeebled, and impressed with the most visionary images. At length he conceived that his sole duty was to pray for the remission of his manifold sins, and to study the Bible and particular homilies. Accordingly, if he walked out, when the devotional fit came upon him, he cared not in what puddle he knelt; or, if at his meals, his food was quitted

for prayer. Soon his spiritual extravagances were so many, and, if interrupted, his violence so great, that he was pronounced insane. As he was uncontrollable elsewhere, he was sent to my establishment. He was then about fifteen years of age.

No notice was taken of his religious enthusiasm: fresh excitement only was avoided. By degrees his thoughts and views were diverted to objects more congenial with his years. Innocent amusements were introduced. As he now behaved very docile, and had some taste for the sciences, he was induced to visit different exhibitions, and to read history and belles lettres. At length, after several cautious trials of his present religious feelings, the Bible was allowed him, and with good effect. Then, and not till then, he was trusted to church, where he conducted himself with the utmost propriety. Soon after, he returned home, and went on a tour. In about six months he removed to a new school, where he finished his studies. He went afterwards to one of the Universities, where he evinced distinguished talents. Eventually he launched into great dissipation, became maniacal, and in a few years died.

Youth is the natural season of enthusiasm: the imagination is then vivid, sensitive, and responsive; and in proportion to the force of the impression, so is the effect. Capacities of very different calibre are equally liable to derangement, though they will not be similarly affected by the same causes. Genius, improperly directed, is more prone to aberration than an understanding of mediocrity, or even of inferiority. Education is the pivot on which the future character, intellectual and moral, turns: hence, on a mind well cultivated and judiciously trained, and on one neglected or formed on a vicious model, very opposite effects are produced by identical causes. To the former, the exciting cause applied

must be very intense, if insanity be rapidly developed; and if religion be that excitant, there are generally others preceding and in catenation, aiding the intellectual derangement: to the latter, if an excitant so powerful as religion be applied without judgment, the seat of reason is easily and quickly subverted. Perhaps in every instance where insanity has supervened to religion, some defect in education may be suspected. Not but the understanding, however informed and strong in prosperity, may be so subdued by adversity as to be extremely susceptible of morbid impressions.

In further illustration, I shall submit three more examples — 1. Where there was natural genius, cultivated by education, but where its developement was not properly watched and directed (Ex. IV.); 2. where the talents were good, but the mind was superficially instructed (Ex. V.); 3. where the mind was highly cultivated, but the judgment was subdued by misfortunes (Ex. VI.): in all which, either the tenour or novelty of the doctrine infused, or the misapplication of religious counsel, was the immediate cause of mental derangement.

EXAMPLE IV.

A young lady, aged about twenty-two, not the only member of her family marked by a natural genius, but of acutely nervous sensibility and delicacy of constitution, had, from living in a state of affluence, retired with her mother to a modest cottage, in a beautifully situated village, where she soon deeply engaged herself in every pursuit that an ardent imagination and pure philanthropy dictate. She was the instructress of the poor, and the comforter of the distressed. In short, she was an enthusiast in every opinion she adopted, or duty that she undertook. In this frame of body and mind, a minister,

not less remarkable for his zeal than for his persuasive powers in enforcing certain dubious tenets, settled in the same place. Struck with his discourses, she gradually imbibed his doctrines, though very opposite to those she had been taught. She grew very disquieted; and although becomingly pious and attentive before, henceforth she devoted herself entirely to theological studies, but without interruption of those good works in which she was ever engaged. Her health, however, soon suffered by the extraordinary ardour she displayed in the performance of the various duties she had now undertaken. To wean her from pursuits which were evidently making as great inroads on her peace of mind as on her corporeal system, she was removed to the sea-side. Here her case was unfortunately mistaken. Her health grew worse, and her spirits more unequal. She returned home; and it was at this period she wrote to a physician, not less distinguished for his private qualities than his love of science, the letter inserted below.*

* DEAR SIR,—The benevolent and persevering attention which I saw you exercise last summer for my unhappy friends, induces me to think that any opportunity of doing good is welcome to you; and that you will not, on account of its length, and the time it may occupy, refuse to read the statement of a case, which I think requires a fuller explanation than ordinary.

I am not, I hope, prompted to write to you by the despicable wish to speak of myself; but by a sincere desire to profit by your assistance in avoiding errors, and becoming as useful as the measure of my talents will permit.

I believe your penetration must have discovered, when my mother consulted you for me, that I concealed some part of my disorder from you; and you probably conjectured the hidden part was a mental disease; since, whatever terrors infirmity of body may bring on, weakness of mind, I believe, only can produce an excessive fear of human opinions.

It was early decided by a medical friend of my family, that my constitution was extremely irritable; a sentence which was quite incomprehensible to me, till experience too well explained it. In my earliest

Nothing can so truly delineate the state of a fine but erratic mind contending against morbid feelings and perceptions as this simple but elegant appeal, or give a

childhood my spirits were very weak, and I frequently shed tears, though, when asked by my mother what was the reason, I could never give any. However, I felt that I wanted something. Perhaps the discipline used for me was not exactly suited; but I know not how it could have been otherwise, since my mother's natural character was as different as possible from mine; so that no experience could lead her to understand me. My outward appearance was exceedingly calm, so that I resembled more the statue of a child than one alive. My mother thought that so much apparent moderation needed no correction, and she did not know that I wanted all the assistance that the most watchful care could give me. As this was the case, I was too much indulged, I believe. As a father, Sir, you will comprehend many little things that to another might appear ridiculous; and they will not appear unimportant to you because they are childish. Amongst your children's books there may, perhaps, be one of Scripture history, with prints; and amongst them one of Nebuchadnezzar in his state of degradation, very ill executed, and probably ridiculous enough. When I was very little, perhaps before I could read, my mother found me crying violently over this print; and, on inquiry, found it was because I thought I might at some time or other become like this king. She laughed at me very naturally, and I felt much relieved, and thought there was no danger. Yet, if I am not mistaken, I had then felt, for the first time, that fear and abhorrence of evil, which has never till lately been sufficiently strong in my mind to produce good.

The clergyman of my native place is a very good man. His doctrines were in that country almost universally considered as methodistical; yet they are to be found in almost every page of the Bible, and at this time are preached, I believe, in almost every pulpit, from that of the University to that of the most obscure village, as the doctrines of the church of England. Opposition had perhaps inflamed his zeal, and induced him to dwell more on faith than on morality; and it was very seldom that we heard him explain and enforce the intimate union between them. His sermons made considerable impression on my mind; but the violence, rather than the warmth of his manner, made it a painful one; and it was not productive of any active effect.

When I was about twelve years old, my sister, a child of extraordinary talents and virtues, died at the age of fourteen, with Christian

more clear prognostic of what was likely to happen. In fact, about a fortnight after it was written, a severe paroxysm of mania followed. In a short time she was

hope and joy. Her death, succeeded as it was by a train of family misfortunes, very much withdrew my mother's attention from me; and I became most completely at my own disposal. In a year or two I fell into extreme indolence. In this slavery I have remained till within a few days, not without almost constant self-aborrence, and some severe struggles.

Your knowledge, Sir, must make it unnecessary for me to describe the debility of constitution, the stupidity of understanding, and the insensibility of heart, which are the consequences of sloth. From these, assuredly, nothing but the mercy of God could deliver me. This I have long resisted, though I have seen it in the beauty of the material creation, heard it from the lips of human genius, and felt it in the application of the Scriptures by my conscience.

Now that I have conquered my sinful habit, and have reason to hope that "more grace will be given," I have still some very painful apprehensions. The weakness of my understanding is such, that a short calculation, or a few moves at chess, gives me a violent headach and a universal trembling. The activity and force of my imagination appear to me such, that, if I were left to myself, there is no extravagance of which I could not be guilty. I have happily found some little active employment; but when I am doing any thing which is merely mechanical, I feel as if (without having any intention of removing) it were impossible for me to keep my seat. When at such times I can find an opportunity of reading a few verses in the Bible, I feel immediately quite calm. But I cannot quite avoid the fear that I should abuse even the medicine of life.

I have happily, in my brother, a friend, on whose strength of mind and goodness of heart I can rely with perfect confidence; but he perhaps wants some of that peculiar knowledge and experience which may be necessary for me. A sensation of sickness, which accompanies my most impatient feelings, and a degree of restlessness at night, give me some hopes, that by the aid of medicine I might be placed in a more secure state.

You will, I hope, excuse the length of my letter, as I thought it right to give you a true and sincere statement of my course of life, as far as regards this subject.

I must add, that nothing but my belief of your confidence in the

carried to ———, to be under the care of the physician to whom the letter was addressed.

With all the seeming candour which pervades her statement, some art is apparent. She alludes to the tenets of the clergyman of her native place, which she denies having had “any active effect” upon her when a child, in the very terms which she would, had she had courage, have described the effect of the new doctrines she had recently heard, and which had actually produced on her mind the impression she deprecates.

In about three months, the case appearing confirmed insanity, she was removed to lodgings in the environs of London, to be under my care. In this stage I first saw her. She was past the sense of all moral attentions; her intellectual faculties were wholly absorbed; consciousness was denied; volition only seemed to be exercised. But in her soliloquies, or rather ramblings, what she said betrayed the inward workings, and that all her thoughts were bent on religious subjects. She was, however, eventually cured.

With the restoration of her understanding, her religious enthusiasm subsided; and she again resumed all the elegant and lighter accomplishments of which she was mistress, but had long neglected. As a convalescent she remained some weeks under my direction. Then, contrary to my earnest advice, she returned to her usual place of residence. Former associations were renewed;

sacrifice which has been made for the sins of the whole world could have induced me to make this disclosure. If I had not this faith, the knowledge of my offences would be death to me; and I cannot endure that any person who does not possess it should know them.

I am, dear Sir,

Your obliged humble Servant,

I must observe, that a fear of alarming my mother prevents my communicating this letter to her.

and she was allowed to pursue her own inclinations. Her health soon again became disordered; she imbibed the most frightful and delusive impressions; and she was threatened with a complete relapse into her former mental malady. In this state I found her, when requested to visit her in the county of ———. Fortunately the means then prescribed preserved her from this calamity. Subsequently, however, as might be expected from such utter neglect of due precaution, she did relapse; and, when I last heard of her, she continued insane.

EXAMPLE V.

A young lady, of good natural parts, but who had had that superficial education which females receive at ordinary boarding-schools, was indulged at home in every vagary of froward fancy. She was just seventeen; and Shakespeare and Radcliffe, and Byron and Love, were alternately the idols of her imagination. Still she was not vicious. A seriously inclined neighbour, pitying her flightiness, undertook to reform her by his pious exhortations. At first they seemed to have a good effect, for she became more grave and steady in her conduct, and very attentive to divine worship. Serious impressions seemed daily to gather strength. She soon, however, went to the extreme, and talked of nothing but religion. Her zeal at length became so ardent, that she read only pious books; and she was particularly anxious to attend every church where she learnt the sacrament was to be administered.

In a short time she was so exalted, and her conduct so inconsistent, that her father took her to France, in the hope that change of scene would correct these aberrations. The very night of her arrival in that country a furious fit of mania occurred—an event pro-

bably accelerated by suffering extreme sea-sickness.* She was confined a few weeks, when she appeared nearly recovered. Upon going out, she witnessed, for the first time, the ceremonies of the Romish church with which she appeared much struck. From that moment she lost all her zeal for the Protestant faith; and nothing would satisfy her but she would be a catholic. She was brought home. No care, however, removed this conceit; and she still continued so wild and unmanageable, that she was sent to a lunatic asylum. There I first visited her. Medical and moral remedies were prescribed: she mended, and might possibly have soon recovered, if some family misfortunes had not interrupted the course of treatment, and induced her removal. In three or four days she relapsed. Soon after, she was sent to another asylum, where, in about six months, she perfectly recovered. Her former religious hallucinations entirely disappeared; and the regimen to which she was probably subjected, produced a degree of steadiness she never before evinced.

EXAMPLE VI.

A lady, the daughter of a merchant, possessing an agreeable person, and all the elegant acquirements which could be bestowed,—at the same time the most correct religious and moral principles, and enjoying all the comforts flowing from domestic life, had very early fixed her affections on a gentleman worthy of her. Reasons, on the part of her friends, interfered to prevent a union; and she endeavoured to subdue her attachment. The struggle was severe, but persisted in a long while. At length, consent was given to the match; they were married; and

* I have been consulted in several cases where mania was clearly consequent on this cause.

a connexion in business was formed between the father and husband. In a very short time, the embarrassments of the former involved the whole fortune of the latter; and in about a year the young couple were left without any provision, with one child, and the expectation of another. What added to her affliction was, the trouble of her parents and their other children, for all of whom she had the tenderest affection.

I knew this lady from her childhood. She never had a good constitution, but had always been subject to severe headaches and other corporeal ailments. The weight of such woes aggravated her complaints; nevertheless she bore all with great fortitude. A near and dear relative, with whom she corresponded, in the attempt to console, very vehemently exhorted her to seek alleviation in religion, which advice she enforced by such spiritual arguments as she thought best calculated to effect it. Unfortunately those arguments were intermixed with many abstract doctrinal points which were new to the sufferer. In the adaptation of them to her own case, she felt great perplexity. Instead, therefore, of deriving consolation, and bearing her misfortunes with that resignation which she at first evinced, and would most likely have continued, had the mild and cheering principles in which she had been bred been resorted to,—she at last adopted, without due examination, the most dangerous sophisms for truths, and yielded her whole mind, forgetful of every other duty, to them.

It was soon perceived that her reason was wavering. She was now sent, to divert the train of her thoughts, to a distant county, on a visit to some kind relations. But the association of ideas was not sufficiently severed: on the contrary, she was allowed too much to indulge in her aberrations, and even to correspond with those, who, without reflection, rather encouraged them. Shortly, complete insanity was developed.

In this state she was brought to London, and consigned to my direction. She was then only twenty-four years of age. There was evidently great constitutional as well as mental disorder. In a few months I had the happiness to see her health much improved ; and every illusion, by degrees, vanish. She went to the sea-side with a proper attendant. In a few weeks she returned to the bosom of her family, much, I must confess, against my judgment, as I did not think the period of probation long enough. Nevertheless, she gradually recovered.

Never, probably, was any one who had been insane exposed to greater risk of relapse. She was immediately placed so as to feel all the wretchedness incident to a change of fortune, and entire dependance. She had, besides, the shock of beholding her husband, to whom she was most affectionately devoted, suffering under a cruel malady, which threatened his life, or his being reduced to the same condition as that from which she had so recently recovered. Yet, after the first struggle, and experiencing some threatening symptoms, she rallied ; and sustained all her trials with astonishing resolution and unerring judgment.

Then it was that she experienced real consolation from religion. Her recent spiritual delusions had passed away. If she remembered the new lights which had so fatally misled, and finally absorbed her reasoning faculties, she was aware of their dangerous effect ; and relying solely on those principles whence she had formerly always derived satisfaction and support, she was enabled to preserve her reason, and attain a state of comparative happiness.

She has since borne children, and is now a widow. Not only these trials, but that of maintaining herself and family by the exercise of her talents, she has met with a persevering and undisturbed mind.

In all these examples, mistaken views, or the misapplication of religion, I apprehend, may be recognised as the remote cause of the mental derangement. And I am the more confirmed in this conclusion from observing, that, as the mental excitation subsided, so the spiritual fervour abated; and when re-admitted to the exercise of their devotional duties, the patients felt and expressed that consolation which pure Christianity, to a mind piously disposed, always affords, heightened, as the impression would naturally be, by a deep sense of gratitude for the mercy vouchsafed in their recent recovery.

Where insanity is a mere effect of erroneous impressions of religion, the peculiar hallucination having relation to it, when reason is restored, vanishes; and no more trace of it, or of any other religious error remains, than of the transient phantasms of a dream. So it was in all these patients. Each of them certainly possessed a constitutional temperament highly susceptible of excitement, and consequently favourable to derangement. Religion, therefore, in these instances, can be considered as the agent only; and, as may be the case with any other agent, the effect was consequent on the misuse, and not on the fair and proper application of it.

To adduce examples where the maniacal action seems to have originated the religious propensity, were acts of supererogation. They are exceedingly numerous. Nothing is indeed more common, when the symptoms are fully unfolded, than to see some hallucination preponderate, connected with perverted views of theology, where no bias of the kind existed while the patient possessed a sane understanding.

It will scarcely escape remark, that five out of the six examples cited are females. The selection is not designed. Were every case complicated with religion recorded, I believe nearly the same disproportion would

be found between the sexes ; at least, such is my experience.

Many causes combine to make women more prone to such impressions. Physically, man is more robust, and has less sensibility, or irritability, than woman ; morally, his education is more solid, and his pursuits more active and definite. The education of females is generally showy, rather than substantial ; and as they naturally possess more ardent and susceptible minds, want of active occupation becomes a most dangerous enemy to them. Thus circumstanced, if any object present itself sufficiently striking, they are apt to embrace it without due examination ; and if of a nature to excite, it soon exercises an inordinate influence. Nothing is so conducive to this effect as new views of religion ; nor is there any stimulus, when applied to such systems, so powerful and irresistible.

The self-described precursory state of the patient (Example IV), is indeed an affecting but just commentary on that condition to which the finest mind is often reduced in a young enthusiast, by attempting to attain, if I may be allowed the expression, hyper-perfection. Nothing can more correctly represent the mental agitation and alarm experienced when doubts are raised and the perceptions diverge, but resolution no longer exists for self-examination.

Although no system of morals can be stable that has not religion for its base, yet there are social as well as spiritual obligations which our duties in this life impose, and which are essential to the preservation of a due equilibrium of the faculties, mental and bodily, of the constitution : which side soever the balance is suffered to preponderate, the corresponding functions will sympathise. Unfortunately, the duties of social life are almost always abandoned by religious enthusiasts : and they appear to think this to be essential to salvation. They

become, therefore, frequent sacrifices to intense abstraction, of which a natural consequence is — insanity.

Those opinions we imbibe in infancy, and which have grown with our growth, rarely exuberate and run into extremes. So, likewise, that to which our corporeal system has been habituated, can be endured without disorder; while, in the economy of one a stranger to it, it proves a violent poison. Thus it is with the intellectual system. I never yet met with an instance of insanity from mere religious impulse, except where innovation had been attempted in an established belief, or where it had produced deep remorse in the breast of one who had sinned beyond hope.

Were I to allege one cause which I thought was operating with more force than another to increase the victims of insanity, I should pronounce, that it was the overweening zeal with which it is attempted to impress on youth the subtle distinctions of theology, and an unrelenting devotion to a dubious doctrine. I have seen so many melancholy cases of young and excellently disposed persons, of respectable families, deranged from either ill-suited or ill-timed religious communication, that I cannot avoid impugning such conduct as an infatuation, which, as long as persevered in, will be a fruitful source of moral evil. The old Romans knew human nature better: they had a law which forbade any person entering upon the sacerdotal office before the age of fifty. This was to prevent theological discussions before an age sufficiently mature was attained. If such studies were likely to disturb a Roman of mature age, we may judge the probable influence on a modern of fifteen or twenty. Seriously, this practice is an alarming error: it is growing to an excess fatal to the preservation of intellectual sanity, and, in a manner, especially dangerous to the rising generation.

Thus it is evident, that religion is sometimes the cause,

sometimes the effect, of insanity. Important, indeed, are the consequences to the remedial system, which may result from an erroneous distinction. But into this consideration I must not here enter.

The over-zealous should hence take example, and remember that the fervour of enthusiasm should be tempered with discretion. The intention may be pure and holy, but the mode as well as the principles of religious instruction may be quite mistaken. The human mind being as differently composed as the features of the human face, is not equally susceptible in all of distinguishing between truth and error in common affairs. How, then, is it to be expected to adopt subtleties in spiritual matters which it cannot comprehend, without a struggle, in which the reasoning faculties will be often subverted?

COMMENTARY III.

PHYSICAL CAUSES.

Physiological and Pathological Observations.

MANY writers complain, that we have a multitude of cases of insanity, describing the ordinary symptoms of bodily disorder; but none that offer a clear, precise, and satisfactory analysis of the mental affection. On the contrary, I believe that the greatest obstacle to the knowledge of the pathology of insanity, has been the long-prevailing error of studying the mental to the neglect of those corporeal phenomena which are almost always cognizable.

The hallucinations of the mind being clearly only the signs of its disorder, as symptoms are of corporeal disorders, they are but of secondary importance in the study of insanity.

Where is the utility of studying the characters of the mental delusion? Can it signify whether a lunatic fancy himself to be a DEITY or a monarch, a philosopher or a conjuror, or any thing animate or inanimate? Ought we not to prefer examining the various signs which indicate functional or structural lesion, and endeavour to find out whether the attendant delirium is idiopathic, symptomatic, or sympathetic?

The diagnostics of insanity differ, it has been justly remarked, from all diseases; for this is not merely a disorder of the corporeal, but likewise of the intellectual and moral faculties. Hence the greater difficulty of correctly marking the diagnosis.

Even Cullen's instructions for acquiring the art of discerning and distinguishing diseases generally, viz. by accurate observation of their phenomena as these occur in concurrence and succession, will not avail in the study of the physical phenomena of insanity; for the most usual and obvious symptoms which present themselves, preserve no order, either in concurrence or succession.

That the brain is the organ of the understanding and the seat of the nervous power, is ascertained and acknowledged. But by what arrangement, or mechanism of parts, this organ exercises the functions of the mind, notwithstanding the researches, experiments, and reasonings, of ancient and modern inquirers, we are ignorant. Neither is it agreed among physiologists whether the brain be the origin, or recipient of the nerves.

The GREAT CREATOR is all perfect; and none of his works manifest that perfection more than man. Every organ and every part of our structure is complete, and adapted to its office; and if the organisation and function of any part be impaired, it is the result either of accident, or of that artificial condition of society which begets disease.

The brain, which is the organ of the sentient and intellectual principles, is, doubtless, as admirably fitted for the due performance of its functions, in health, as other parts of the animal machine. But the passions, miseries, and wants of man, act as perpetual stimuli, and induce morbid actions in that organ.

"The brain," says Bichât, "is to the mind that which the senses are to the brain:" it transmits to the understanding the impressions coming from the senses, as the latter send the impression made on them to the surrounding parts.* Its functions appear subjected to

* Recherches, &c.

the same general laws as the functions of other organs : they are developed and deteriorated with the progress of age ; are modified by habit, sex, temperament, and individual disposition ; are troubled, weakened, or exalted in disease ; perverted or destroyed by physical lesions ; and, lastly, like all other organic actions, are incapable of explanation. To study them, we must confine ourselves to observation and experiment, divesting ourselves of every hypothesis. The brain, also, besides being liable to all the diseases of other parts, is exposed to many peculiar to itself, and which rank among the most serious afflicting human nature. Among these may be enumerated apoplexy, palsy, epilepsy, vertigo, convulsions, ecstasis, catalepsy, chorea, lethargy, cephalalgia, compression, concussion, phrenzy, delirium, and mania. In common, it is likewise subject to inflammation, suppuration, congestion, irritation, and, according to some, to spasm and atony ; to organic vices and accidents, which injure its structure ; and, lastly, it is affected by metastasis or translation of diseased actions, and by sympathy with diseased parts, however remotely situated.

Every other organ has its respective function, and disease, perhaps, peculiar to its structure ; and the effect will bear relation to the importance of the function which the organ affected exercises in the animal economy. An injury which, applied to one organ, would occasion functional disorder only, would, applied to another, cause death. Experience teaches us to calculate, with tolerable accuracy, the effect of accident or disease on the heart, lungs, stomach, liver, or kidneys ; but on the functions of the brain, though most important, yet being less apparent, we can rarely offer a prognostic.

As the brain sustains the most extraordinary states of disease, and extensive injuries and mutilations, to the destruction of very considerable portions of its substance,

and yet neither the intellectual faculties, nor sometimes the functions of sensation and volition are disordered, it is obvious, that the integrity of the brain, on which the mechanical philosophers insisted, is a fallacy.

But although the integrity of the brain, as the organ of the intellectual functions, be not essential to their exercise, since any of the nerves which are instrumental to the external senses of sight, hearing, smell, taste, or touch, or those necessary to muscular motion, may be impaired without disturbing the mind,—yet, as the organ of the nervous system, its integrity is quite essential to a sound exercise of these external senses, of the feelings, and of the voluntary powers.

The celebrated anatomist, Thomas Willis, who in the seventeenth century, by his dissections, first traced the structure of the brain and appendages, by a natural consequence speculated on the faculties of the mind, which he assumes to be an emanation of this organ; and he descants largely on the passions, and their reciprocal influence on those faculties. His theory, however, of the causes of insanity, and its consequent divisions, is too strongly tinctured with the eccentric doctrines of that period to be regarded. Nevertheless it may be remarked, since the doctrine is by no means exploded, that he placed the seat of the passions in the middle of the great mesenteric plexus, like a sun among other planets, whence they diverge as radii from a centre to the periphery.*

Some succeeding anatomists, in examining the structure of the brain, were solely influenced by the vain hope of elucidating the corporeal residence, and nature of the intelligent principle. But others were prompted by a laudable desire to enlighten the pathology of insanity. Among those who first devoted their attention to this research were Bonnetus, Lieutaud, Morgagni, Meckel, Littre, Greding, &c. These observed, that the skulls or

* Nerv. Descript. cap. 27.

brains of idiots and lunatics almost always displayed some alteration in the form of the cranium, or lesion, disease, or organic defect in the brain. Hence the proximate causes of deficiency, or derangement of intellect, were ascribed to mal-conformation, density or thickening of the bony covering, or to disorganisation of the brain and its appendages, compression of it by tumours, disease of the pineal gland, inflammation, vascular distensions, effusion, the brain too hard, soft, or dry, and to various other morbid conditions of the encephalon.

Ferriar, to elucidate the physiology of the brain, made a collection of the most remarkable cases which exhibit the morbid alterations, extent of injury, nay, of destruction, which this organ will bear, without lesion of mind, or loss of life.*

Reasoning inductively, many able physiologists have concluded, that the organ of thought (the brain), though it be quite essential to the exercise of volition, holds but a secondary rank; and hence have assigned more importance to other organs in the system; and hence, too, more strongly insist on the fallacy of all prognostics concerning life or death, or the loss or preservation of the sentient or intellectual faculties.†

Dissatisfied with the results of their investigations respecting the uses of the distinct parts into which the cerebral mass is plainly divided, anatomists adopted different modes of dissecting it. Vesalius sliced it horizontally and obliquely from the vertex; Varolius from the base. Steno, to whom Winslow ascribes all his anatomical knowledge, expressly condemns the slicing of the brain at all in dissecting it, and commends the unfolding and separating of the plicæ of the convolutions, as more skilful and useful.‡

* Manchester Memoirs.

† Cabanis, Rapport de l'Homme.

‡ Winslow's Anat. Expos. vol. ii.

Gall and Spurzheim, in their anatomical demonstrations of the nervous system, have preferred Steno's method, and commence dissecting the brain from its base; and display the situation and form of its parts and various convolutions, by carefully separating them with the handle of the scalpel and their fingers. By pursuing this mode, they lay claim to some discoveries in the structure of this important organ, which have escaped the observation of their predecessors; and upon these discoveries have founded a peculiar system of physiology.

They consider the brain the exclusive organ of the manifestations of the mind. Not, however, as an organ single and indivisible, but as composed of as many particular and independent organs as there are particular and independent propensities and sentiments. They contend, that all the parts of the nervous system, the cerebrum, cerebellum, and spinal chord, are double, and have a common connexion by commissures; and hence, that when one organ is diseased or injured, so as to be incapable of performing its peculiar function, that function is still carried on by its twin organ, which is sound. So in cases of hydrocephalus, where the brain has, upon *post-mortem* examination, been considered as destroyed, and yet the mental faculties had been preserved intact,—the convolutions are not really destroyed, but only expanded, and form, as it were, the walls or bag of the collection of water.

The substance of the brain they maintain, also, is fibrous. This fact, in his admirable dissection of the brain, I thought I saw Dr. Spurzheim clearly demonstrate to exist, at the commissures or connexions of parts, by decussations; and he fully proved the possibility of the expansion of the convolutions.

This decussation of the nerves, which many modern anatomists deny, is an opinion of the highest antiquity. Cassius Jatrosophista, a disciple of the first

Asclepiades, who lived three centuries before the Christian era, distinctly describes the crossing of the nerves at their origins at the base of the brain; and, moreover, assigns this disposition of the nerves as the cause why, when the *membranes* of the brain are injured on one side, paralysis takes place on the opposite side.* Aretæus adopted these opinions of Cassius.† Lancisi and Santorini coincide in them, though they differ as to the points where the decussation occurs; and recently, Serres and others have, by numerous dissections, proved, that in cases of paraplegia, the hemisphere of the brain, opposite to the side paralysed, is always found materially diseased or altered in structure.

This disposition of the origin of the nerves, and morbid condition of the brain, in cases of paralysis, is ingeniously converted by the supporters of the system of cranioscopy into proof of the existence of double organs; and hence they assume, that when one organ is injured or diseased, its function may be carried on by its fellow in the opposite hemisphere. But although this may explain some of the phenomena of the nervous system, it does not thence follow, either that the organs of sentiments and propensities, into which the cranioscopists map the brain, really exist, or that when one is disabled, its peculiar faculty is conducted by its fellow, which is sound.

Galen especially, in his physiology of the brain, consigned to its distinct parts separate functions or faculties; but not that these portions were all double, or independent of each other. The cranioscopal system seems founded on Galen's idea of the brain, amplified and extended by a fertile imagination.

Mr. G. Combe, of Edinburgh, denominates this system

* Le Clerc, Hist. de la Méd. Partie II. lib. iii. ch. 11.

† De Causis et Sympt. Morb. Diut.

phrenology; and, by his able and systematic manner of treating it, attempts to advance it to the pretension of a science. The influence of his eloquent pen will doubtless enlist numerous converts; for there are always more ready to adopt theory, especially when clothed in seductive language, than to examine facts and judge for themselves.

This writer exults in the apparent inconsistency of preceding physiologists, because they allege that the function which they believe the brain exercises does not suffer with almost total destruction of that organ; observing, that no other part of the human body is known to retain its function unimpaired amidst total or partial change or destruction of its structure.* But can any comparison be endured between the divine immaterial function of the brain, and the palpable and material functions of other parts of the human body?

There appears to me no inconsistency in those who have witnessed almost total destruction of the brain, and yet believe it is still the organ of intelligence; unless they admitted for truth the phrenological dictum, "that the organs are double, and that one may be affected, without the other participating in the injury; and that the organs of the intellectual faculties constitute so small a portion of the brain, as to leave nearly two-thirds of the whole mass to be destroyed on *both* sides, without necessarily interfering with the intellect."† None dispute that a sound mind may be exercised, though a large portion of the cerebrum be destroyed; but the question is, whether the remaining portion comprises as many of the twin intellectual organs as are necessary for perfect intelligence.

Mr. Combe further observes, that "no stronger proof could be adduced of the imperfect state of mental

* System of Phrenology, p. 541.

philosophy, as taught by the metaphysicians, than the fact, that in the diagnosis, treatment, and cure of insanity, their doctrines are entirely useless." This may be true; but the science of phrenology, if it deserve the character, must be infinitely advanced and matured, before it can be admitted, that the phrenologist, because he studies the mental powers in connexion with the organisation, can, therefore, distinguish the diagnosis more precisely, or treat disorder of the intellectual faculties with better success. He may believe that he best understands the healthy functions of the organs and faculties, and that when these become diseased, the phenomena, in the order they are developed, are accounted for upon natural and plain principles: but from all I have read, seen, or heard of the application of the knowledge this science is said to impart to the treatment of insanity, I have never learnt that these high expectations have, in any instance, been realised.

There is no question, that the phrenologist who, as Mr. Combe remarks, could amuse an insane patient by harmless attempts to bring into action one or more organs, to correct or counteract the diseased manifestations of other organs, would succeed in curing him sooner and better than the physician who should uniformly treat madness or fury by bleeding and general depletion; and melancholia by exhibiting stimulants and tonics; for the practice of the former would possibly be innocuous,—while that of the latter would be decidedly injurious.

"Diseases of the organs of the mind," he continues, "differ from affections of other organs in this, that they are susceptible of great alleviation from moral treatment;" and hence, he infers, phrenology affords superior aid. Now, who ever before implied, that moral agency had no effect in the cure of other diseases except those of the organs of the mind? Experience confutes the postulate and the inference. If every physician were

a fool, the powers of reasoning might never, through mental influence, be exerted with effect in the cure of corporeal diseases; but he who knows the boundaries (not of each faculty, as the phrenologist assumes, but) of common sense, will discriminate correctly, so as to apply this moral mean, and thus “avert prejudicial influences from the patient.”

I will not, however, be so presumptuous as to assert, that the system is altogether one of error. Impartiality demands that the grounds on which it is founded should be long, carefully, and personally investigated. This I have not in every respect done; but as far as close attention to Spurzheim’s anatomical demonstration of the brain, and Mr. Combe’s arrangement of the organs and their correspondent faculties, enables me to judge, I cannot yield my conviction. Indeed, till more extended observations have been made, and time has sobered the enthusiasm of its votaries, I must oppose to phrenology the general objection to the reasoning of lunatics, viz. that the arguments are very ingenious, and often logical; but the premises not being proven, the conclusions are sophisms.*

No attempt appears to have been made in England till within these forty years to investigate by dissection the pathology of mental disorders. Mead, a century ago, discouraged all attempts, by pronouncing an oracular

* It has been aptly remarked, that the advocates of the phrenological system carefully publish every fact which supports their theories, but none which oppose them. Whether the anecdote I shall relate merely proves an error in judgment of the celebrated founder of the system, or the heads examined to be examples of perverse configuration, I cannot decide, and will leave others to conjecture.

When Dr. Gall was in this country, he went in company with Dr. H. to visit the *studio* of the eminent sculptor Chantrey.

Mr. C. being at the moment engaged, they amused themselves in viewing the various efforts of his skill. Dr. Gall was requested to say, from the organs exhibited in a certain bust, what was the

opinion, that the immediate cause of insanity would for ever disappoint our search—a conclusion with which Monro, a few years after, in his admirable reply to the visionary opinions of Battie, acquiesced.* Whether these, and similar opinions, or the influence of the metaphysical speculations on the immateriality of the mind, deterred anatomical inquiries, it is difficult to say; but it is certain that the relation of mental derangement with organic lesion had heretofore attracted little regard from English pathologists.

Cullen refers to the prevailing theories of the nature of the understanding; but he thought insanity chiefly, and sometimes solely, a mental affection. Yet considering the connexion between mind and body in this life, he coincides with Haller, Boerhaave, &c., and admits that the operation of the mind must depend on a particular condition of our corporeal nature.†

The first impulse in this country to anatomical investigation of the morbid phenomena of insanity may be ascribed rather to accident than to a philosophical spirit of research. Dr. Andrew Marshall, in 1789, observed in a paper he read before a medical society, that he had found the brain diseased in two cases of hydrophobia; and he stated, generally, that he believed that organ was

predominant propensity or faculty of the individual. He pronounced the original must be a great poet. His attention was directed to a second bust. He declared the latter to be that of a great mathematician. The first was the bust of Troughton, the eminent mathematician; and the second that of Sir Walter Scott!

Talent, the phrenologist asserts, is relative with the ample development of the cerebral mass. Mr. Chantrey exhibited to Dr. Gall drawings of numerous heads. The cranioscopist selected one, whose ample cerebral development gave a sure index of vast talent. It was a fac-simile of the head of the Earl of P—mf—t!

* Remarks on Dr. Battie's Treatise on Madness, 1758.

† First Lines (1541).

also materially affected in mania.* This opinion was rudely attacked by the celebrated physiologist John Hunter. In truth, the general opinion at this time was, that insanity left after death no evidence in the brain of its previous existence. To support his opinion, Marshall made many dissections of the insane in Old Bethlem Hospital. But it was not till 1815, and after his death, that his *Morbid Anatomy of the Brain in Mania and Hydrophobia* was published.

Dr. Haslam's dissections of the brains of maniacs† preceded by many years the publication, though not the examinations, of Marshall. Both, however, equally illustrate the object of inquiry, and fully prove a morbid condition in the encephalon of the maniacs submitted to their inspection.

However, when it was proved, beyond dispute, that the brains of maniacs commonly presented morbid appearances, it was assumed that these alterations were the causes of the disorder; but it was soon objected, that such were the effects, and not the causes, of intellectual derangement. Among these sceptics were Crowther,‡ Black, &c., and their doubts coincide with the opinion of many eminent physiologists who have since entered upon the inquiry. Others, while they cannot yield acquiescence in these conclusions, admit them with certain modifications.

Another difficulty had before arose: earlier anatomists, as Bonnetus, Morgagni, &c., in examining the crania of maniacs, confessed, that in some, neither malformation, nor alteration, nor morbid appearance of any kind, could be detected in any part of them. This has been since confirmed by more modern anatomists, and

* Sketch of Marshall's Life, by Sawrey, p. xxiii.

† *Observ. on Madness, &c.*, by John Haslam, 1798.

‡ *Pract. Remarks on Insanity*, p. 25.

upon an infinitely more extended scope of observation than their predecessors possessed.

I have myself assisted at several accurate anatomical investigations, conducted by eminent demonstrators, of the crania of insane patients who have been under my care, and who had exhibited up to the hour of their decease the most furious symptoms of mania for months, and yet not a vestige of disease could be traced.

Similar results have strengthened the assumption, that insanity is purely a mental affection; hence also the impression, that whenever there was any lesion or disease observed in the encephalon, such was the effect, and not the cause, of the insanity. And this inference was further confirmed by the remarks of Pinel, Esquirol, &c. that the same morbid appearances displayed in the bodies of those who had died mad, were discovered in the corpses of those who had died of diseases quite unconnected with insanity. Others were weak enough to imagine, because many insane persons recovered their faculties, that therefore their derangement could not have a corporeal origin.

But we ought not to presume, because there are no visible marks of a morbid condition of the brain or its appendages, that therefore the whole are in a perfectly healthy state. Where is the anatomist who will dare maintain, that a brain is free from disease or structural change, because, after the most minute inspection, he cannot discover any?

That eminent physiologist, Haller, conceived that "in disorders of the mind, the brain and its connexions are usually affected: and when, in some rare instances, we can discover no disease of these parts, we may conclude, either that it is seated in their very elementary particles, or has not been sought for with sufficient patience and attention." But even in the elementary composition of the brain, anatomists are not agreed. How, therefore,

can they pronounce whether a brain is in a sound state or not?

Except in connate idiocy, and mental derangement from mechanical injuries, what direct proof is there that insanity has its seat in the brain?

A person affected by transient insanity can rarely be subjected to an anatomical inspection. Insanity of itself is not mortal. Were it so, we should soon discover sensible proofs of it in dissections. When a lunatic dies of an acute disease, the brain or other parts may exhibit the same appearances as if he were sane; and when of any chronic affection, it is impossible to decide whether the morbid appearances which his brain may present be the effect of the chronic disease, or of long-continued maniacal action.

This, however, is certain—that when an insane person has been cut off by an acute disease or accident, or has destroyed himself, and the insanity has been of short duration, there are seldom exhibited any alterations, or morbid appearances in the encephalon, beyond slight vascular congestions or effusion. But in long-standing cases, a *post-mortem* examination generally exhibits strong evidence of disease in that organ. Sometimes, however, violent insanity has continued for years, and not a visible trace of diseased structure or action has been discovered in the brain or elsewhere.*

* Esquirol has given a graphic drawing illustrative of the true features of furious mania. This patient (a woman), after being a year in La Salpêtrière in the same state of excitement, and there is no telling how long before she might have been so, died very suddenly. Nothing in her condition announced this fatal event. It is rather a singular coincidence, that this corpse, selected on account of the patient's peculiar violence, should, on dissection by this able pathologist, exhibit not the slightest mark of disease or alteration.—*Dict. des Sc. Méd. art. Folie.* Pl. 2.

When the mental derangement has been transient, there is just reason to expect neither organic lesion nor morbid change in this organ; for simple excitement or irritation, in peculiar constitutions, is probably an adequate cause. But, granting that the insanity should be of some duration, and yet no morbid appearances on dissection be discovered, should we thence conclude none exist? Is not the human body subject to, and influenced by, peculiar diatheses? Will the scalpel detect the apoplectic, hydrocephalic, scrofulous, or gouty diathesis? The testimony of Morgagni, Cheyne, Abercrombie, Powell, Stark, &c., prove that death from apoplexy frequently occurs; and yet no evidence of cerebral lesion has been discovered on the minutest investigation of the brain.

Scrofula is believed by many to be an imperfect organisation of structure; and certainly inflammation in scrofulous habits is attended with peculiarities unknown in any other constitution. The inflammation of gout is different, and has different results from ordinary inflammation. The same may be said of rheumatic inflammation.

Inflammation itself is relative: it varies in its nature and degree with the part affected, and the intensity of the stimulus applied. When irritated, each organ or texture in the human body puts on a diseased action, which is as peculiarly its own as the function it performs. But can such peculiarity be determined by dissection?

Were we to insulate a portion of a dead body, and examine its texture, without a previous knowledge of the disease affecting the person while living, could we decide what disease had existed? Why, therefore, should not the brain be influenced by the same laws, and undergo a specific change, and be the site of disease of which

there is no visible trace? Why, in fine, should we expect to discover by the eye the maniacal diathesis, when all others are impenetrable?

Again; the organs of the external senses are five distinct pairs of nerves. But although the offices of these nerves be distinct, having no relation one to the other, yet there is no difference in their internal structure, by which their appropriate functions are manifested. It is not by examining the substance of any detached nerve, that we ascertain the specific sense which it conveys: that is known by its situation and connexions, and not by its texture.

Further; who can say that excitement, nay inflammation itself, has not existed in the brain, if the circulation through a great portion of it is, as it is said to be, colourless? A morbid action of other important organs is indicated by appropriate symptoms, and yet, on a subsequent examination of the suspected organ, it often appears perfectly sound. A disease of an organ may be structural or functional; and the former may cease, while the latter, though a consequence, is long protracted. Thus, as every other organ imbibes morbid actions, of which *post-mortem* examinations offer no evidence, and which morbid action is *sui generis*, is it inconsistent to conclude, that the brain also assumes a peculiar action, which may be appropriately designated the maniacal?

Some have argued, that because the nature of the alteration or action of the brain which originates insanity is unknown, that attempts to cure it must be fruitless. But may we not reason the same in every disease? We are ignorant of the precise nature of any morbid action; yet, if medicine deserve confidence, we succeed in curing many.

Touching the opinion, that the alterations and morbid appearances which have been noted in the encephalon

of those who have died insane, there can be little doubt that many of them take place after death; particularly serous effusions. But I think, without denying morbid changes may precede, it is a legitimate inference, that generally they are posterior to the development of the malady.

Individual dissections in such pathological inquiries prove nothing. They must be multiplied beyond ordinary opportunities, before sufficient facts can be collected for fair deductions. Hence pathologists very properly refer to those sources which offer results on a large scale of observation.

Much important information may be elicited from the labours of men possessing such extensive opportunities as Greding, Esquirol, Georget, Neumann, &c. And the collection made by Dr. Scipion Pinel, embracing those of Messrs. Esquirol, Villermay, Beauvais, and Schwilgaé, and which, in the aggregate, comprise two hundred and fifty-nine dissections of maniacs, offers a mass of pathological examinations particularly worthy of record. They are thus classed: —

Lesions of the Brain.

Apoplexy	27
Organic lesion of the substance of the brain.....	19
Organic chronic lesion of the membranes.....	22
	— 68

Lesions of other Organs.

Chronic peripneumony	20
Phthisis	22
Chronic peritonitis.....	9
Chronic pleuritis	7
Chronic inflammation of the digestive canal	50
Other organic lesions of this viscus	13
Lesions of the liver.....	5
————— kidneys	3
————— ovaries	2
————— uterus	4
	— 135
	203

In the other fifty-six corpses there was no visible evidence of disease in any of the viscera of the three great cavities! The spinal chord was examined in only two cases.

From these dissections it follows: 1. That lesions of the brain, the organ of the intellectual functions, are in the proportion of one to two of those of the other viscera; 2. That more than *one* in *five* corpses of maniacs present no evidence of any disease whatever! 3. That in a great majority of cases, the insanity was a sympathetic affection; and, 4. That as, in more than a fifth of 259 dissections, no lesion or alteration could be detected, it strongly corroborates the opinion, that, when such lesions or alterations are observed, they are posterior, and not anterior, to the development of the mental derangement.

These are very important pathological corollaries, and being deduced from a collection of dissections by anatomists of high character, their accuracy ought not to be suspected.

Every case where the body of an insane person presents no visible morbid appearance, as well as those which do, ought to be recorded. To note also the date of the incipient attack, would add value to the dissection.

Generalising upon a numerous collection of dissections, in which both positive and negative evidence is given, and duly weighed, a more certain prognostic might be formed than at present can be hazarded as to the event.

But there is no necessity to predicate an organic change of the brain as the cause whether of insanity or delirium. For, agreeably to the same law to which every organ seems subjected, it is not essential for functional disorder, that structural disease should precede. Continuance of functional lesion will produce organic lesion; and be the action what it may on which the

understanding depends, when that action is deranged, it will probably superinduce a disease of structure.

Although these morbid changes so generally observed in opening the heads of maniacs, belong as well to other diseases, yet they may have originated in an action *per se*.

That insanity arises from a specific action, independent of an actual state of cerebral disease, is obvious; because the mental derangement will cease, or fluctuate, during the presence of tumours, or other adventitious injuries or alterations which the brain sustains. The return of reason, therefore, in such cases, can only ensue from a cessation of that morbid action; and the recurrence of the delirium from the renewal of it.

From whatever predisponent cause insanity may proceed, if it be not primarily an organic affection of the brain, it ends in being so. This seems demonstrated by the facility of its cure at the beginning of an attack of mania, comparatively with the attempt made at a more protracted period.

Some pathologists have ventured to decide the character of the living by the morbid appearances which presented on dissecting the brain. Bonnetus imagined, that the brains of those who died of anger or fury were hard and friable. Morgagni, if they were found hard and coriaceous, thought they belonged to persons proud and stubborn; and if soft, to those who had been meek and undecided in character. Portal and Dumas have also speculated, from the form of the convolutions, colour, and density of the brain, upon the caliber of the intellectual faculties.

Very small brains seem always to have been considered as denoting mental incapacity. Sometimes, however, the converse is so conspicuous, as to set all reasoning at naught. Nevertheless, in the brains of connate fools, some defect or anomaly is always discovered, from

which it might be inferred, that for the mind to be perfect, the organ of the mind, *ab origine*, must also be perfect. This, however, like the speculations of Bonnetus and Morgagni on the connexion between constitutional character and the condition of the brain observed in death, is equally fallacious.

The genius of Haller prompted him to attempt throwing a stronger light on the pathology of insanity than individual dissections offered. He collected the histories of dissections of maniacs, and by comparing them, endeavoured to establish a correspondence between the living and morbid phenomena represented. Sir Everard Home, in a similar spirit of investigation,* has endeavoured to elucidate, by dissection, the causes of different cerebral affections, by carefully noting all the attendant symptoms, and comparing them with the morbid appearances in the brain and its appendages; and thus prove a connexion between cause and effect. The labours both of Haller and Home, as might be expected, proved abortive: the deductions of the one were derived from the few dissections of maniacs then published by other anatomists; and the other did not pursue his researches upon a scale sufficiently extensive to come to any conclusion. Perhaps no blame attaches to Sir Everard for this defect; since popular prejudice opposes in this country so many obstacles to pathological investigations as almost to preclude the hope of solving any question requiring numerous dissections.

In this respect our continental neighbours have an enviable advantage. In France, anatomists boast, and truly, of having dissected hundreds of bodies of insane persons. If the pathology of insanity be capable of elucidation by dissection, we might expect it from such opportunities. But nothing conclusive results from the

* Philos. Trans. 1814.

numerous dissections of Pinel, Esquirol, Georget, &c., though men of unquestionable talents and industry.

Recently, however, some pathologists, who have pursued the same course of anatomical investigation, affirm that they have discovered a positive and undeviating connexion between certain delusions of the mind and well-defined morbid conditions of the encephalon. Attaching to these statements all the importance of discoveries, they have founded on them a new theory of the causes of insanity.

Of this doctrine I shall take a very brief notice. Dr. Bayle, whose opinions have priority,* maintains, that mental derangement, in a majority of cases, is the result of positive chronic inflammation of the membranes of the brain. He describes two kinds of inflammation, each having perfectly distinct anatomical characters and symptoms; the former he denominates chronic or latent *arachnitis*, because it principally has its seat in the arachnoid; and the latter, *chronic meningitis*, because it conjointly affects the pia mater as well as the arachnoid membrane. The latter affection, he asserts, is so uniformly attended with incomplete paralysis, that of 1453 cases of mental alienation, a fifteenth of the men, and a twenty-eighth of the women, were affected with this symptom.

This author is confident that he is able, not only to connect specific symptoms of mental disorder with specific morbid conditions of the encephalon, with which there is a uniform correspondence,—but also to shew, that in a great proportion of cases, the commencement of the mental disturbance is to be imputed to a chronic disease of the membranes—of which he describes the forms, stages, and complications, and to which the different

* *Traité des Maladies de Cerveau et ses Membranes*, par A. L. J. Bayle, M.D. 1826.

stages of cerebral disease, and those of intellectual disorder, clearly belong.

He describes chronic meningitis as a particular and essential disease, entirely distinct from acute meningitis; but it may, he says, proceed from the latter state, if it be susceptible of putting on this form. The name *chronic* indicates only the slowness of its progress and its duration, which is ordinarily long, and does not express the mode of its origin.

The physical symptoms which the author describes as ushering in this disorder, or which accompany it throughout, do not materially differ from those of other forms of mania, except a slight embarrassment of speech, a hesitation and slowness in the pronunciation of particular words, and sometimes even a slight degree of stammering; and this is precursory to the mental affection. A difficulty in the motion of the lower extremities is also sometimes remarked.

The mental character of this peculiar form of insanity is a prevalence of *ambitious* ideas. Bayle conceives he could always discover in the morbid examinations a degree of injection of the pia mater proportionate to the degree of ambitious delirium which the patients evinced.

He further remarks, that there is a striking analogy between drunkenness, in which there exists evident signs of irritation and transient congestions of the brain, with that alienation occasioned by chronic meningitis. Drunken men have their speech embarrassed, and pronounce slowly and with stammering; their walk is unsteady and vacillating, and they describe zigzags in walking; they are ordinarily exalted, and talk without ceasing; their ideas are disturbed and incoherent;—but that which is very remarkable is, that their ideas are always gay and joyous, and constitute very often, though in a much weaker degree than in inflammation of the membranes, a true *ambitious* delirium.

He concludes, that the kind of mental alienation he has described is the effect of the irritation or inflammation of the gray substance of the brain, which immediately deranges its functions. This irritation and this inflammation are in their turn direct results of a chronic inflammation of the membranes, which commences on their internal or cerebral face.

Of one hundred dissections of the brain, he did not meet with a single exception, he says, to the diseased appearances which are connected with the symptoms of this form of mental disorder.

Contemporaneous with Bayle's work is another from the same school, by Dr. L. F. Calmeil, on Paralysis, as it appears in lunatics.*

These two pathologists seem to have pursued their inquiries at the same time, in the Royal Lunatic Asylum of Charenton; and though they describe, under different names, the same affection in lunatics, yet as authors appear almost strangers to each other's labours. This is very uncandid and suspicious. Besides, there are some discrepancies in their respective histories which very much shake the credit due to either.†

* *De la Paralyse, considéré chez les Aliénés*, 1826.

† I well remember, when visiting Charenton in 1817, being much surprised to see so great a number of lunatics paralytic, and especially of the lower extremities; nor could I then obtain any satisfactory reason for it. I own I suspected it might arise from some mismanagement, and especially from the effect of damp and cold; to which I thought all the insane patients, both in the public and private establishments in Paris, were too much exposed.

I have since learnt that all the insane military are sent to Charenton. Of those afflicted with chronic meningitis, one-third were military men; and the greatest part of those so affected had served in the campaigns of Buonaparte, and, of course, had been subjected to all the rigours and privations of severe service — a fact that satisfactorily accounts for the number of paralytic lunatics, in that especially; and likewise in other French asylums.

When contemporaneous inquirers, even in the same schools, do not generally confirm each other's morbid discoveries; or others, pursuing the same path, pass by them in silence, nay, even positively deny their existence, nothing can be so discouraging to the pursuits of the pathologist.

Nevertheless, the ardour of anatomical researches must not be relaxed on this account. Enough of success has attended to stimulate wider investigation. We owe the great discoveries of a Newton as much to the errors of his predecessors, as to the acuteness and energy of his own innate genius.

The French anatomists will do well in the career of their inquiries to remember the opinion of Pinel, that there is no necessary connexion between the specific characters of insanity and the nature of the existing cause; and that the phenomena in the living and the dead disclose no uniformity or correspondence. Similar causes will produce maladies quite opposite to insanity, yet the morbid phenomena on dissection may correspond in those who have died insane and in those who never were so.

If the lesions and alterations in the brains of the insane do not indicate precisely the proximate cause of insanity, still they are decisive proofs of its seat in that organ.

Unquestionably, the pathology of cerebral affections is greatly indebted to the zealous and scientific researches of modern anatomists. It would therefore be ungenerous to attempt altogether to throw discredit on the ardour which has within these few years been displayed in investigating the morbid anatomy of the insane; yet it is impossible not to suspect that too much enthusiasm and aptitude for theory have influenced the pursuit; and that extraordinary facilities for morbid examinations sometimes tend more to encourage speculative theories than to advance truth.

Thus Bayle, in the table he gives of the anatomical characters of one hundred cases of insane persons, finds in the brain of each various morbid phenomena, uniformly corresponding with the mental symptoms which characterise the malady. Many, however, who have carefully dissected the encephalon with similar mental symptoms, can detect no morbid appearance whatever. Because there is sometimes no change of organisation discovered in cases similar to Bayle's, I will not assert that he is mistaken; but the inference is natural and strong, that this ingenious physician has attempted to prove too much, and more than facts warrant. He is, however, supported in his positions by the observations of Falret, who, by the by, lays claim to be the original discoverer of this morbid condition of the membranes with coincident mental symptoms; and likewise by those of Calmeil and Voisin.* I am bound, therefore, though sceptical, to concede, that the evidence is respectable. Enough so, certainly, to stimulate pathologists to ascertain, by further examination, the accuracy of this new doctrine.

Were the views of these pathologists established, a fatal blow would be struck at the phrenological system.†

Dr. Abercrombie, in his able researches‡ into the diseases of the brain, has observed various morbid conditions of its membranes; and has adopted the term *meningitis*. His labours, however, were not particularly with a view to elucidate the causes of mental derangement. He describes delirium as an attendant symptom

* Des Causes Morales et Physiques des Maladies Mentales, 1826.

† As the organ of ambition, self-esteem or love of approbation, is said to present but a point on the convexity of the hemispheres, and the manifestations of the functions of this organ depend on a state of health, and the inflammation extends over the whole surface of the membranes, how is the function in such case to be preserved?

‡ Path. and Pract. Researches in Diseases of the Brain and Spinal Cord, 1828.

of *meningitis*, but not as being characterised by the peculiar ideas mentioned by Bayle, Calmeil, &c. It appears from the remarks of this acute pathologist, that a very slight vascular injection of the pia and arachnoid membranes is sufficient to produce the most fatal consequences.

Nothing seems to abate M. Bayle's ardour. He has more recently published a dissertation, in which he has endeavoured to shew that a chronic inflammation of the mucous membrane of the stomach and bowels influences and modifies the character of the mental aberrations.* The dread of poison, and repugnance to food, are conceived by this author to be the most constant and essential symptoms which attend on a gastro-enteric state of the digestive tube. One of his corollaries is a truism which every pathologist must admit; viz. that this morbid condition of the mucous membrane of the *primæ viæ* often exists without mental disturbance. And he might have added, that dread of poison and refusal of food have frequently attended in melancholia, where no trace of gastro-enteric disease could be discovered in the patient while alive, or on the most careful dissection.

Doubtless, it was natural to premise a dyspeptic condition of the digestive apparatus in the cases Bayle describes: beyond that his inferences are untenable. From his rapid career, I fear a vivid imagination and fondness for theory are leading his judgment astray; and that, like the patients whose bodies he examines, he adopts illusions for realities.

Rouchoux, Rostan, and other modern French pathologists, in their endeavours to unveil the mystery which envelopes the causes of insanity, describe the very frequent occurrence in lunatics of a morbid condition of

* *Revue Médicale.*

the cerebral substance, which they call a softening of the brain (*ramollissement de cerveau*), and which morbid condition is always attended by certain pathognomonic symptoms.

This softening of the brain, Abercrombie remarks, like gangrene, may arise from two very different conditions—inflammation, and failure of the supply of blood from disease of the arteries. The former appears to have been the cause of altered structure in the cases he investigated, which were not confined to old persons or the insane; the latter was rather an effect of the deficiency of the vital stream in those already deranged in intellect, and who had attained old age.

The brain, in every form of insanity, is imagined by some always to be in a state of inflammation; or of sub-acute inflammation, according to others; or of irritation;—but inflammation, either of the cerebral mass or its envelopes, even with ardent fever, may exist without delirium; consequently it is a legitimate inference, that delirium or insanity may be developed, and the brain be free from an inflammatory action.

Dumas considered, that mania was always the chronic state of phrenitis; in fact, that there could be no such derangement except phrenitis had previously existed.* Vogel, and many others, appear to have entertained similar opinions.† Whether the latter meant the same condition of the encephalon, which has since been supposed to exist, and to be a proximate cause—that is, a species of sub-inflammation or erythism, or whether simple irritation only, it is difficult to say.

I see no reason why a state of irritation, or morbid action of the brain distinct from inflammation, should

* Thèses sur la Manie.

† Heckenberg, Dissert. de Insaniâ longâ.

not obtain, and produce disorder of the intellectual faculties, as well as the more violent action of inflammation.

Irritation, too, is not irrationally assumed to be the parent, or initiatory step to inflammation; for irritation primarily affects the balance of the circulation, and the impulse once given augments it, and induces re-action. Hence the nervous and vascular systems act and re-act on each other; and hence various diseases originate. Irritation, too, like inflammation, may have its varieties; for, in one part or texture, it may be excessive—in another, it may never arrive at activity—or either may exist in a part or organ in different degrees of activity. These opposite conditions of irritation, therefore, have been contradistinguished as *super* and *sub*. But these distinctions are too nice for practical uses, and certainly cannot be safely adopted in reference to the state of the brain in cases of insanity.

Although I differ from the opinions of Vogel, Dumas, &c., that mania always proceeds from an inflammatory state of the encephalon, yet there is no doubt that mental derangement is often the sequel of inflammation of the brain.

That insanity is the effect of cerebral inflammation, I am persuaded is an error as dangerous as it is common. Nothing is more clear, in my opinion, than that the inflammatory and maniacal actions are totally distinct.

It must not be overlooked, that many eminent men have considered insanity to be a pure disorder of the nerves. Cullen, whose opinions so long pervaded the schools, was of that opinion. Crichton supports the same doctrine. It is true, the latter also refers to marks of disturbance in the circulation, and even quotes the celebrated experiment of Dionis on the transfusion of blood, in evidence that furious madness was produced by the experiment in several persons on whom it was

tried. Yet he rejects the influence of the circulating system, and acknowledges the proximate cause of delirium to be a morbid condition of the nerves.

This inference, however, is founded entirely on the hypothesis, that there “is a peculiar fluid secreted, or at least formed, in the medullary substance of the nerves;” and therefore, that the principal cause of frenzy and delirium must “always arise from a specific diseased action of those fine vessels which secrete the nervous fluid in the brain.”*

Even the learned Dr. Good in the present day, when, upon the best evidence,† physiologists have discarded the notion of a subtle fluid “volatile and energetic,” or animal spirits, acting through the nervous apparatus, assigns to the brain the structure and functions of a gland of a peculiar kind, secreting and supplying a peculiar fluid, which maintains the nervous power or energy as it becomes exhausted; and he insists on the necessity of a quantum of the fluid secreted in the sensorial vessels for the exercise of sound intellect.‡

The almost equally ancient hypothesis, that sensation was transmitted by means of the vibrations or oscillations of the particles of nervous matter itself, as if the nerves were chords, rests on no better authority.

What may be the nature of the nervous power, or how it acts and connects us with the external world, it is not my purport to inquire. But that the proximate cause of delirium and insanity arises from a diseased action of the fine vessels which secrete and circulate the nervous fluid, it is essential to deny.

That most able commentator, Dr. Cooke, has wisely concluded, that, notwithstanding the laborious investigations of the physiology of the nervous system by phi-

* Inquiry, &c. vol. i. p. 168. † Bostock's Phys. vol. i. p. 253.

‡ Study of Medicine, Phys. Proem. vol. iii.

losophers, in various ages of the world, yet, in many particulars, it remains involved in impenetrable obscurity.*

It is to be lamented, therefore, when the doctrine of the secretion and operation of this fine and subtle nervous fluid circulating through the brain is exploded, that it should be revived as the true physiology of the organ of intelligence, without any new evidence or argument in support of it.† Dr. F. Willis adopts the obsolete opinions of Cullen, Crichton, and Good, to prove the correctness of his own postulate, viz. that insanity depends on “a specific diseased action of those fine vessels that secrete the nervous fluid of the brain;” but he is silent on the testimony of subsequent physiologists who disprove, by experiment, the existence of this nervous fluid.

He also alleges, that the bodily derangement in what he terms the high state of mental derangement, is seated in the præcordia, “where the heart, lungs, and diaphragm, are in a state of the utmost disorder;” and he appeals to the opinions and practice of ancient physicians for the correctness of his views. And, lastly, he disputes the opinions of Arnold, Cox, and Mayo, that the proximate cause of insanity can be in disorders of the vascular system.

Were such theories of the causes of insanity again to prevail, I fear the improvement which has taken place in the medical treatment of it during the present century, would retrograde into the extremes from which it has so recently been rescued — extremes which clearly mark, that, influenced by the ancient pathology of this malady, or rather by no pathology at all, one class of medical practitioners prescribes stimulants and tonics — another,

* Treatise on Nervous Diseases, 1820.

† Treatise on Mental Derangement, by F. Willis, M.D., 1823.

depletion and evacuants, extempore or routine — and another, trusts conveniently to the *vis medicatrix naturæ*, and *médecine expectante*.

Physiologists, in their researches into the phenomena of the nervous system, have assigned to the nerves distinct functions according to their situation: the one set, it is assumed, destined to receive the impression of exterior objects, are those of sense; the second is the seat of the moral and intellectual faculties, and are placed in the brain; the third regulate the voluntary movements, and arise from the spinal chord. This doctrine extends a little beyond what Eristratus and Herophilus taught above two thousand years ago, and not much. Indeed, it would appear from certain cases of insanity, as if derangement of the moral and intellectual faculties sometimes have their immediate source in affections of that set of nerves which arise from the spinal chord.

I have seen three cases which give rise to this suspicion — one in a very eloquent divine, the other two in females. In the first case, the patient was always maniacal when free from pain in the spine, and sane when the pain returned to that site. In the second case, one of deep melancholia, there appeared a difficulty or disinclination to move before she became insane; disease of the spine, however, was not suspected; nor was it discovered till after she recovered her senses that some distortion had occurred during her long mental depression. In the third case, a disease of the spine had long existed, so that the patient could walk but little; but on the supervention of melancholia she could walk two miles.

As the morbid examinations of the contents of the cranium proved so little satisfactory in elucidating the causes of mental derangements, anatomists very properly extended their researches into the other great cavities of the body. The heart, great vessels, lungs, stomach, and

intestines, liver, spleen, uterus, &c., have all been examined for evidence of some change or disease; and hence, when any alterations were discovered, they were judged to be the remote causes of insanity. But we know that similar morbid appearances are often detected where the intellects are undisturbed.

Esquirol, in his anatomical researches, which he has so extensively and zealously conducted, with the intention more satisfactorily to elucidate the pathology of insanity, thought, from a frequent alteration which he found in the condition and position of the transverse colon in the bodies of maniacs, that this might operate as a sympathetic cause.

Sometimes, he observes, its direction is oblique or perpendicular, so that its sinistral extremity lies behind the pubes. In other cases, it descends in form of an inverted arch below the pubes, even into the pelvis. This displacement does not depend, he says, on thickening of the parietes of the intestine, or from accumulation of fæces; for in the greater number examined, the colon was empty, and in all its texture healthy. The patients, particularly those affected by melancholy, in whom this displacement is peculiar, frequently complained of pain in the epigastrium. They compared the pain to what would arise from a tight cord surrounding the body at the height of the hypochondria.

Morgagni and others have remarked these varieties in this intestine, but not as peculiar to insane persons. Other anatomists in the same path do not appear so often to have seen this phenomenon. Georget never met with more than one such instance; and others of his contemporaries, who have pursued the same course of inquiry, are silent upon this peculiarity.

There are abundant proofs, both from living and *post-mortem* examinations of the insane, that the brain undergoes, from the invasion to the end of insanity,

or of life, if the malady continue so long, various morbid conditions. The incipient symptoms almost always denote great vascular excitation and action: this may be suspended and renewed, with indefinite intervals, for a very long time; and at length the morbid action ceases altogether, and sanity is restored.

When not cured, and the patient does not die of any accidental disease, I coincide with Georget in thinking, that a weakness or atony of the brain is produced. Tissot would say, the *cerebri tonum* was impaired.*

Whatever particular delusions existed when this atonic change in the condition of the brain happens, are apt to persist. But often this atonic state manifests itself by an abolition, more or less complete, of intelligence. Paralysis, at first partial, then general, follows; and all signs of fury cease. Thus the brain is first affected as the intellectual agent, through the movement and force of the circulation, and next as the nervous agent, from the diminished power and influence of the circulation.

That the brain becomes enfeebled or atonic in chronic insanity, is further established by the vigour and renewed healthy action which is imparted to it from an accession of fever, even in cases deemed, from their long continuance, incurable. For fever being a state of vascular excitation, accelerates the circulation, and propels more blood through the cerebral vessels, and thus revives the dormant functions of the intellectual organ.

The influence of sympathy in the production of insanity is very extensive, and probably is the most common source of it. Van Helmont revived the ancient opinions respecting the sympathetic action of diseased viscera one on the other, and especially on the functions of the brain. He, however, considered the viscera as the

* De Valetud. Liter. p. 22.

centre of sensations, which being thence irradiated, communicated with surrounding parts. These, he thought, were their natural functions; and if the organs were diseased, so likewise were the sensations. He adds many judicious remarks on the effects of impressions which connect morbid associations with the mind, and originate insanity. Confiding, however, too much on his theory of morbid sympathies, to explain the phenomena of diseases, he contemned equally with his predecessor, the charlatan Paracelsus, all anatomical investigations into the seats and causes of diseases, contending, that what they called "the anatomy of the living," was the true way of acquiring a knowledge of all maladies. Bordeu, Barthez, Portal, Dumas, Cabanis, and most of the French physiologists, are imbued with the principles of Van Helmont.

Even the celebrated Pinel assigns more influence to the abdominal viscera than any other organs in eliciting insanity.

The latter eminent physician and philanthropist constituted a new era in the annals of insanity. If we cannot accord with his pathology, happily his general views and moral treatment of the malady were so philosophical and practicable, that they have extended wherever science was respected and humanity cherished.

Like most enthusiasts, however, he has taken but a limited view of the physical causes of insanity. The moral causes he has more successfully traced; but influenced almost exclusively by the theory of visceral irradiation, or sympathetic influence, he nearly overlooks the very striking physical phenomena exhibited on the accession and during the progress of mental disorders.

In those cases of insanity which are sympathetical, it has been observed, there is always a great analogy preserved; that is, if a remote part be attacked by in-

flammation, and mania by metastasis be consequent, the delirium assumes all the violence of the inflammatory diathesis; if it be from congestion, that species of inflammation denominated subacute prevails; and if it be from nervous irritation, the circulation may be found to be irregular, and the pulse may indicate it; but there will be no symptoms denoting inflammation, nor will the blood, when abstracted, exhibit signs of it.

Winslow, Soëmmering, Cuvier, Majendie, &c. have endeavoured, through the medium of the great sympathetic nerve, to explain the phenomena of sympathies. Bichât conceived, that melancholia, hypochondriasis, &c., which others have ascribed to lesions of the abdominal viscera, really arose from alterations in the system of ganglions, through which the numerous sensations and irradiations are conveyed to their respective organs.* Arnaud also attributes mania to derangement of the functions of the ganglions, as well as to the abdominal plexus.†

The doctrine of sympathies may have been carried too far. Bichât candidly remarks, that the very obscurity regarding their causes ought to exact a rigorous observance of every fact relating to the subject, and a rejection of all hypothetical opinions.

A cautious examination of all the symptoms will generally instruct us which disorders are idiopathic and which sympathetic. But what can withstand the strong affection for mystery and the marvellous? In medicine especially, which is too conjectural for a science, it is found much more easy to refer to occult causes than to seek truth by patient induction: and for this purpose the doctrine of sympathies is very convenient. Nevertheless, although sympathy may often have been assigned

* Recherch. Physiol. art. vi. sect. 4, in note.

† Traité Anal. de la Folie, 1807.

as a cause of disease for want of a better, yet it must be acknowledged, on the other hand, that it is a frequent source of insanity when little suspected to be so.

But the inquirer into the nature of all sympathies must, I fear, be content with the conclusion of an able pathologist, that “the cause is the immediate will of God.”

Although we know not the causes, nor the mode by which sympathies act, yet we have abundant proof of their operation in originating diseases which reciprocally act on the mind.

There is no organ with the morbid actions of which the functions of the brain so frequently sympathise as the liver. As the connexion is intimate, so is it reciprocal; for morbid actions of the former equally, and perhaps as frequently, disturb the functions of the latter. In importance, the functions of this organ are only second to those of the brain, as far as regards the operations of health; and, as in the brain, so too in the liver, the circulation of the blood is complex, and very liable to be interrupted by extrinsic causes. Hence the greater facility of disturbing its functions.

All the passions, anger especially, violently affecting the sensorium, act immediately on the liver; and every excess that disturbs the functions of the stomach, easily determines blood in undue proportion to the vena portarum, where, on account of the remoteness of this vessel from the heart, the motion of the blood is always sluggish, and therefore congestion is easily induced. The bile, consequently, is secreted in scanty quantities, the alimentary processes become ineffective, a morbid action of the connecting nerves follows, and the functions of the brain are implicated and disordered.

Many facts attest, that blows on the head will create, not simply disordered function, but disorganisation of the liver; and *vice versâ*, nothing is more common than

instances of mental disturbance originating in injuries of this organ, or in secretions of morbid bile, or obstructions of the biliary ducts by gall-stones, spasm, &c.

Diseases of the hepatic system will even originate delirium, furious mania, melancholy, and suicide.

Insanity is much more common among the lowest classes than the supporters of its mental origin are inclined to admit. Now, drunkenness is certainly the great vice of this class in Great Britain and Ireland, and the propensity is gratified usually by ardent spirits. In a table of 1370 lunatics, admitted into the Asylum at Cork, Dr. Hallaran says 160 were insane from this unhappy indulgence.*

Dr. J. Cheyne,† on the authority of the late Mr. Todd, mentions the great prevalence of hepatic disease upon examining the bodies of lunatics who had died in the hospitals of Dublin.‡ I need scarcely remark, that from the cheapness of spirits, and the habits of the lower orders of Irish, such appearances might naturally be expected. Indeed, I have myself discovered in the bodies of several poor lunatics which I dissected, a condition of the liver that favours the inference that it was produced by excessive drinking.

The French, comparatively, are considered a sober people; but it appears that inebriation is a frequent cause

* Pract. Observ. on Insanity, ed. 2, p. 35.

† Obs. on Apoplexy, p. 198.

‡ In a paper I published in the Lond. Med. Rep. vol. vi. p. 284, entitled "OBSERVATIONS ON THE PATHOLOGY OF INSANITY," I quoted, on the authority of Mr. Todd, as referred to by Dr. J. Cheyne, that the former had found the liver more or less diseased in upwards of four hundred maniacs and idiots whose bodies he had dissected. The more I reflected upon this statement, the stronger, I confess, was my conviction that there must be some error in it. I therefore made particular inquiry; and I feel it a duty I owe to the public, as well as to myself, to mention, that I learnt Mr. Todd's statement to be a great exaggeration of facts.

of insanity among the Parisians. One hundred and eighty-five out of 2,507 lunatics admitted into the French hospitals, were insane from drunkenness ; and of these *one hundred and twenty-six* were men, and *fifty-nine* women !*

Perhaps in no instance would the liver of an habitual drunkard be found diseased, without the stomach also having undergone, by the same process, a structural lesion. Without such stimulus, gastric affections are among the most constant attendants of insanity, especially in melancholia and hypochondriacal patients.

It appears, indeed, a legitimate conclusion, that a morbid condition of the chylopoietic viscera is sympathetically a frequent cause of mental derangement.

Gastric irritation, too, is a much more frequent cause of mental derangement, through this mysterious agency, than is usually imagined. Long-continued nausea is often a precursor of a paroxysm of insanity. Violent nausea also, from sea-sickness continued for a few hours, has produced mania in three instances within my knowledge.

The efficacy of remedies, with a view to restore the functions of the digestive organs, after the violence of a paroxysm of insanity has abated, strongly implies that the disorder of them has powerfully influenced the mental derangement.

Intestinal irritation has, doubtless, its share in sympathetically influencing the brain. Some authors ascribe delirium to intestinal worms ; and among the poor, who live on a bad diet, this may be a frequent cause of much sympathetical irritation of the brain.

Anatomists also describe singular states of disease of the spleen in the bodies of persons dying insane, and hence have imputed much influence to this organ. I have met with two such cases on dissection ; but no

* Comptes Rendus, &c. 1826.

symptom existed which indicated disease of this viscus while the patients were living. Indeed, the physiology of the spleen is too obscure to justify any reliance on an opinion respecting its functions and sympathies.

The reciprocal sympathies between the uterine system and the brain, inducing insanity, are too frequent and notorious to escape observation.

In two instances I have known sudden mania originate from the irritation of cutting the *dentes sapientiæ*.

Mental derangement has more often its rise from scrofula than is generally supposed. If we inquire into the history of a patient, or well examine his exterior, the traces of this morbid condition will be very frequently discovered.

Scrofula very frequently extends to the brain, and then incurable insanity commonly follows. Now many physiologists insist, that this organ is a gland; and when scrofula attacks the glands, we know that it renders them unfitted for the particular function assigned to them. Cannot the brain be affected by scrofula in the same way? This is certain, that insanity grafted on scrofula is always very obstinate, unless it finds a solution in the suppurative process.

Mania alternating with the enlargement or diminution of the maxillary and sub-maxillary glands, and other cases where the induration of them always occasioned great mental excitement, sometimes occur.

The lamentable vice of masturbation is a frequent and formidable cause of insanity. It is a habit too often acquired before puberty; and if persisted in, at length subverts the constitution and the intellectual faculties. But sometimes, Pinel tells us, it is the consequence of association, in large communities of insane persons, and then it is the effect of the loss of reason.

Much has been ascribed to the influence of temperaments in predisposing to insanity generally, and also to

particular species of it. The sanguine temperament is supposed to be predisposed to mania; the nervous, characterised by extreme susceptibility, to both mania and monomania; the dry or melancholic, characterised by timidity and inquietude, to melancholy; the moist or choleric, to mania and melancholia, and sometimes to demency. Writers on insanity add the apoplectic temperament also, with a large head, as predisposing to demency.

There is, unquestionably, reason for imagining, that both our moral and mental qualities are influenced by the peculiarities of constitution; and that more of the sanguine and nervous temperament are maniacal, and of the bilious and melancholic melancholy. But the degree of minuteness to which some physiologists have descended, in connecting human peculiarities with mental aberration, can only be justified by those who still adhere to the ancient humoral theories.

What was excusable in Pinel, in his researches on a subject so neglected as he found insanity, would, now that our pathological knowledge is more extended, be mere affectation.

It may gratify curiosity, but of what practical utility have been the inquiries respecting the meagerness or obesity of the bodies of the insane, or the stature, colour of complexion, hair, and eyes?

If the character of the derangement always corresponded with such particular features, then a distinct form of insanity would be peculiar to each nation.

In the southern countries of Europe, where the inhabitants, very generally, have black eyes and hair, and dark complexions, nearly all the cases would present one character. In the northern, where these features are as commonly light and fair, the opposite. But the fact is, that insanity does not assume a specific type in any

country. We meet with its varieties in every constitution and in every clime.

Nevertheless, I do not infer that the doctrine of temperaments is altogether to be disregarded in medicine; for it is certain that our judgment, guided by attention to constitutional peculiarities, may frequently anticipate the nature of an approaching disease. It is to the generalisation only of the doctrine, and not to the principle, that objection lies.

Any reference to the influence of the planets as a physical cause of insanity, might be judged superfluous, were there not many who still insist on the occult operation of lunation on the human body. This impression is a remnant of astrological medicine, which assumed that all human motives, actions, and diseases, were directed by the movements of the planetary system. Hence, that the changes in our ideas and actions were regulated by the phases of the moon, became a common superstition; and hence, *lunacy*, derived from the Latin, *luna* (moon), was adopted as synonymous with the old Gothic word, *mad*.

Aretæus attributed epilepsy directly to lunar influence. Galen entertained the same opinion. Celsus acknowledged the influence of the sun and moon on the human body. A century ago, Mead wrote expressly on the same subject; and he adds, that Tyson, Physician to Bedlam, observed, that the ravings of mad people kept lunar periods, accompanied by epileptic fits.

Heberden wisely remarks,* that no one has yet confirmed the opinion of the influence of the moon on the human constitution; and those who have had the best and most extensive opportunities of observation, unanimously reject it.

* *Commentarii de Morb. Hist. et Cur.*

Undoubtedly, many diseases observe a certain periodicity; and it is not improbable, that the paroxysms of violence among lunatics confined in large asylums are actually increased at the periods of the full moon; but even if so, this is susceptible of a natural explanation. Maniacs are, in general, light sleepers; therefore, like the dog which “bays the moon,” and many other animals remarked as being always uneasy when it is at the full, they are disturbed by the flitting shadows of clouds which are reflected on the earth and surrounding objects. Thus the lunatic converts shadows into images of terror; and equally with all whom “reason lights not,” is filled with alarm, and becomes distressed and noisy. I believe that the moon in no other way affects the insane.

Neither must we suppose that the influence of the humoral pathology is yet extinct. On the continent of Europe, especially, the offices of black and yellow bile, pituita, &c., are still supposed to be active agents in the operations of the mind; and hellebore to have an anti-maniacal effect.

This commentary, prolix as it may appear, is but an epitome of the hypotheses which have been promulgated on the physiology and pathology of the brain as the organ of intelligence; and on the causes of derangement of the intellectual functions.

Many other phenomena, which are obvious in the physical system of the insane, have, however, been so slightly noticed by pathologists, and yet appear to me so important, that I shall not hesitate to extend the inquiry.

COMMENTARY IV.

HEREDITARY PREDISPOSITION.

IN certain constitutions peculiar modifications exist, which are termed idiosyncrasies. Thus, ipecacuanha is sometimes obnoxious to the Schneiderian and the mucous membranes; shell-fish, drupaceous and other fruits, to the stomach; the odour of different flowers and particular substances, to the olfactory nerves; and these idiosyncrasies may descend through successive generations. The gout is the inheritance of one, phthisis of another, apoplexy of a third, scrofula of a fourth, and so on; and these likewise may be propagated. All these peculiarities are predispositions. Peculiarities of form, features, or complexion, also, are transmitted to our offspring. Every disease that assumes a constitutional character can, John Hunter said, be given to a child; and then it becomes what is called hereditary. There is, however, he adds, no such thing as an hereditary disease; but there is an hereditary disposition for a disease.

If the external figure, features, and colour, be propagated — if certain perversions and peculiarities of our external senses and bodily functions, descend to our progeny — if particular diatheses are transmitted through generations, no doubt ought ever to have been raised that the brain may be imprinted with an hereditary disposition to insanity, and be, like any other constitutional characters, propagated *ad perpetuum*.

The doctrine of constitutional predispositions to spe-

cific diseases being propagated, is not new ; and we have, in the instance of syphilis, a disease propagating itself. Why insanity should have been supposed to be exempt from this general law of nature, it is difficult to conceive, except on the mystic ground of its immaterial origin.

The liability of mania, demency, epilepsy, leprosy, &c., to extend through future generations, is an opinion confirmed by the experience of all ages. Some have imagined that insanity moves *per saltum*, and appears in every other, or every third individual, in lineal descent. Such was the opinion of Ludovicus Mercatus, a Spanish physician, who wrote a work on hereditary diseases. This, however, is incorrect. The development of insanity may escape one generation, and appear in another ; but no rule in this respect obtains.

It is of little real importance whether it be a predisposition, or the malady itself, which descends and becomes hereditary ; but no fact is more incontrovertibly established than that insanity is susceptible of being propagated ; or, in other words, that a specific morbid condition sometimes exists in the human constitution, which, by intermarriage, or according to the vulgar but expressive language of cattle breeders, by breeding *in and in*, may be perpetuated *ad infinitum*.

Hereditary predisposition, therefore, is a prominent cause of mental derangement.

Mania and melancholia do not propagate their respective types : a maniac may beget a melancholic, and *vice versâ*.

Sometimes, in a large family, we find all the forms and relations of insanity developed in a remarkable manner. Mania, melancholia, hypochondriasis, apoplexy, paralysis, epilepsy, convulsions, chorea, hysteria, &c., or high nervous irritability, are often found to pervade one or the other of the same progeny. Nay, even the degrees of comparison are marked in the capacities of some families.

This I have seen exemplified in a respectable family — one son has transcendent talents, the second is inferior, the third has been for years in a state of fatuity, and the fourth is an idiot. That great wit and madness are nearly allied, is not a poetical fiction; but there is this dissimilarity, — the one is rarely ever, the other is generally an inheritance.

Few, I believe, are more particular than myself in endeavouring to trace every case of insanity to its source. It is a duty which I conceive every physician owes to his patient, as well as to himself, to ascertain whether there be an hereditary predisposition; because the correctness of his prognostic greatly depends on a knowledge of the truth.

Hereditary insanity may be as successfully treated as when it arises from an accidental cause; but when we know that a predisposition exists, we can decide with more accuracy the degree of excitement necessary to produce the effect, and the probability of a recurrence of the attack.

Common sense, if not a regard to the welfare of the patient and happiness of his family, one would think to be sufficient to induce the relations of an insane person to give the physician whom they consult every information required on this point. What can be a motive sufficiently strong in such case not only to conceal, but often to deny, an hereditary predisposition, is to me quite incomprehensible; yet nothing is more common. I will quote a strong instance: A young lady, of good family and fortune, was placed under my care, in whom mental derangement had been some time developed, till at length she was too violent to be kept at home. I made the usual inquiry into the probable causes of the malady, and whether hereditary predisposition might be suspected. This was positively denied; but it was suggested, that being very fond of hunting, she had several times experienced severe falls

from her horse, and might have injured her head. Upon examining the cranium, I actually found a very singular depression of a part of the skull; but whether it was natural or accidental, no one could inform me. I stated to my patient's friends my suspicion that this depression might operate mechanically as a cause of the insanity; and, with their consent, an eminent surgeon was consulted upon the propriety of applying the trephine, with a view of removing such cause. Before any decision upon this question, I learnt from another quarter that several of this young lady's nearest relations had been insane, and that two had died in that state. The operation was, therefore, declined; and she recovered. I believe few cases can occur where the inducements to a candid avowal of hereditary predisposition to insanity were more powerful, yet they were not of sufficient force to elicit the truth. This perverse concealment has often a very baneful effect.

It is very remarkable, that when the desire of concealing hereditary insanity is so great as to run every hazard rather than confess it, yet no care is taken to correct such predisposition; and although a person knows that it is inherent in himself, he is the least careful in betraying proofs of it to the world.

Eccentricity itself is a link in the catenation of the phenomena of a morbid mind. Individuals are often distinguished by a singularity either of ideas or pursuits; or by an equipage or dress unlike that of any body else. There must be some obliquity in the perception and judgment of such persons, for they certainly do not perceive the difference between themselves and the commonalty. Many of these eccentricities or singularities, however, if unnoticed and unchecked, grow stronger with time, and ripen into perfect insanity.

Esquirol assigns only one hundred and fifty out of two

hundred and sixty-four cases in his private practice, to *hérédité*; but in mine I have clearly ascertained that an hereditary predisposition existed in six-sevenths of the whole of my patients. Of some I could procure no information, but do not doubt it prevailed in many of them. The patients most exempt are those, as might be expected, whose mental derangement had a sympathetic origin; as, for instance, puerperal mania. Out of fifty-seven cases of this affection, I could detect an hereditary predisposition in only about half of them. But where it pre-exists, mania, from the processes of parturition, is more apt to be repeated.

Among the highest ranks, hereditary insanity is more common than among the lower; for the former most frequently contract marriage with their own rank, or even with their own family. Hence, wherever the system of clanship, or family connexion, has been most strictly preserved, there it most prevails. Examples are numerous in ancient Scottish families; and insanity is more common in Scotland than in any country.* So likewise in all nations or sects, whose civil or religious institutes enforce intermarriage.

Of all people the Jews have preserved themselves most free from intermixture by marriage with strangers; and hence it is supposed insanity is most frequent among them. One of the youngest insane patients I ever had under my care belonged to a respectable Jewish family: his father and mother were insane, and his six brothers and sisters became, like himself, deranged, as they arrived at the age of puberty. One of them died

* We are told, that in ancient days, in order to preserve their race free from hereditary taint, when any Scot was afflicted with a disease capable of being propagated, their sons were emasculated and their daughters banished; and that, if any female affected by such disease were pregnant, she was to be buried alive!—*Boethius, de Veterum Scotorum Moribus.*

insane; my patient recovered from his first attack in about three months.

Insanity among the Society of Friends, who usually intermarry in their own fraternity, is very prevalent.

There is no reason why a maniacal diathesis should not exist, and be propagated through a family, as well as the diathesis of scrofula, phthisis, gout, apoplexy, epilepsy, &c., or a mere adventitious disease, like syphilis.

One type only of mental derangement can be said to propagate itself: the propensity to suicide often preserves a marked singleness of character through successive generations and large families. Of this I shall give some examples when treating on that form of insanity. Hypochondriasis sometimes is found to descend.

It is clear, however, that it does not follow as a matter of course, because one, or even both parents were insane, that all their offspring are inevitably doomed to the same calamity. Common observation refutes such a conclusion. The malady, even in those hereditarily predisposed, will lie dormant till old age, and then appear; nor is it elicited without the application of an adequate cause. But I have seen several instances of insanity developed at the early age of thirteen and fourteen, where there was no possible exciting cause but constitutional predisposition.

Derangement of the mental faculties is not to be expected before those faculties are sufficiently developed which synthetically constitute a perfect mind; but if deranged as soon as the mind has attained perfection, and without any exciting moral or physical cause, a pure hereditary origin is strongly indicated. It has been suggested, that the influence of the nascent sexual feelings at the period of puberty provokes mental derangement where predisposition exists. But I have met with boys in whom insanity in various forms has been displayed as young as

thirteen, and in whom no signs of virility were visible : an hereditary predisposition, however, existed in every one of them.

It is very rarely that hereditary predisposition exists in a double degree ; that is, from both parents. When it does, if their children were to be placed under precisely similar circumstances in life, the probability would be greater of all these becoming insane, than all the offspring of a couple in whom insanity had been displayed in one parent only. But as it is very improbable that any two of the same family should be situated so exactly alike, there is little fear that insanity will be the fate of the whole family.

Whenever a child bears in its exterior characters a strong similitude to one parent, a resemblance in constitution and disposition, conforming more with that parent than the other, may be suspected. Therefore, when one parent only has been insane, or inherits the predisposition, some of the children may partake of the constitution of the one, and some of the other ; and those who most resemble the parent exempt from predisposition, will be most likely to escape insanity.

My opinion upon two points relating to this interesting question has been sometimes professionally required by those contemplating marriage, and who were conscious that insanity had existed in one or the other of their progenitors ; First, whether a person born of parents in whom insanity has never been developed, but who, one or the other, were descended from a family so afflicted, was capable of propagating it in his own children ? Secondly, whether a child born before insanity had been developed in either parent was as liable to become insane as one born after it had been developed ?

To the first question I have answered in the affirmative ; because I have met with many insane persons

neither of whose parents had themselves been insane, but the progenitors, brother, or sister, of one or the other of those parents, were so.

To the second I have replied, that a child born either before, or after the accession of insanity in a parent, provided that parent's progenitors or relations in blood had been insane, was liable to hereditary insanity. But if the insanity of the parent were adventitious, and not hereditary, the child born before the mental disorder had occurred of course could not have it by inheritance; but how far a child born after the occurrence of the adventitious insanity was liable, I could not decide.

Puerperal delirium oftener occurs without hereditary predisposition than any other form of mental derangement, yet in these cases it is apt to recur in succeeding labours. This implies a greater disposition in the brain, when once it has been so affected, to resume the maniacal action; and I know no reason why, if it originates in any other cause, insanity should not recur.

Reasoning, therefore, analogically, I am strongly inclined to think, that whether insanity be hereditary or adventitious, once occurring, the maniacal diathesis is thereby stamped: for, upon what other principle can we account for the generating of insanity itself, or any diseased condition or idiosyncrasy, which we see propagated, and descending through whole families for several generations? The disease must have originated in some one. It cannot have run on from the creation.

Insanity, doubtless, may be so modified by intermarriages with stocks exempt from it, that progressively it wears out; otherwise, all the world ere now would have become mad.

The propagation of hereditary predisposition, and the natural extension of population, are the causes which are always physically operating, and increasing the number of the insane. Greater precaution in matrimonial con-

nexions might check the influence of the one cause; but the other can be limited only by the dispensations of Providence.

Wherever a predisposition to insanity is known or suspected to exist, human efforts, judiciously applied, may frequently, perhaps generally, prevent the explosion. We should naturally expect that the individual himself so circumstanced would always be on his guard, and pursue such a course through life as might best ensure exemption; or that the relations who were aware of an hereditary propensity in him would exhibit a watchful anxiety upon the appearance of any symptom indicative of its approach. The contrary, however, is the fact; and those who have most to fear appear to be generally the most indifferent to the matter. No preventive measure is adopted: there is no thought of the morrow. Those who are best acquainted with the reasons for apprehension are as careless of every premonition as the patient himself. When the event is self-evident, and until the consequences of their wilful blindness are felt, the truth is evaded; and if it be hinted at by a medical attendant, or a friend, the chance is, that great offence is given to the family.

This is one of the perversities in this perverse malady, which, like the intelligent principle, is a mystery not to be penetrated.

COMMENTARY V.

ON THE VASCULAR AND NERVOUS SYSTEMS.

MOST nosologists class insanity among the *neuroses*; and hence it has been popularly received as a disease exclusively of the nerves.

Let us examine if there be not ground to assume, that the disorders of the sanguiferous system have as great, or greater influence in originating insanity, than those of the nervous system.

Some authors advert to certain anomalies in the circulation in cases of insanity, especially in the earlier stages of the malady. But whether prepossessed with the opinion, that it be a disease only of the intelligent or thinking principle, or a disorder solely of the nerves themselves, as the instruments of this intelligent principle, I cannot decide; but it is clear such phenomena are rather incidentally than specially noticed.

The late Dr. Caleb Parry is an exception. He has exhibited, in a full and perspicuous manner, the disorders of the sanguiferous system, and their influence on health; and he especially applies his reasoning to prove the specific effects of such disorders on the operations of the mind.

It has been objected, and perhaps truly, that this observant physician, in ascribing so great an influence to the circulation in originating both corporeal and mental affections, attributes less to the influence of the nervous system than it actually exercises on the human economy.

Possibly he thought, that as much had been written

on the influence of the nerves, and so little on that of the circulation, a less extended view of the former was called for. However this may be, there is no doubt that he has thrown much light on the origin of many diseases before very obscure; and more, in my opinion, on the pathology of insanity.

Perfect health cannot exist unless the balance between the nervous and vascular systems be exactly preserved. While they act in unison, every function is regular; when either preponderates, disease commences. Sometimes the corporeal functions only are disturbed — sometimes the mental functions are implicated in those of the body; and this constitutes insanity.

But the nervous and vascular systems in every case of mental derangement seem in opposition. Sometimes actively, sometimes passively so; but during a paroxysm of mania they are always in a state of antagonism. The preponderance of either may, as we have seen, be determined both by moral and physical causes.

No fact is easier of demonstration than that an increased activity in the circulation of the brain generally takes place in the incipient stage of insanity. But it is equally clear, that the maniacal action cannot depend wholly on accelerated circulation. If it did, the effect of sleep, during which not only the motion of the blood, but of all other fluids, and actions of every kind, are considerably retarded, would be to diminish that maniacal action. Whereas, after maniacal persons have slept, the morbid action of the brain awakes also, and with redoubled force.

Although our mere animal movements may be continued by the influence either of the nervous or vascular systems, independent of each other, yet it does not appear possible that the intellectual functions can be sanely exercised without the co-operation and due equilibrium of both.

Neither the vascular nor the nervous system can receive an insulated impression; for whether the irritation which an impression produces be applied either to the sanguiferous or lymphatic vessels, or the branches of nerves in connexion with them, both systems participate, and equally suffer. Thus we find alterations, or even disorganisations of structure, result from long-continued nervous complaints; and at length the parts so affected proceed to a state of erythism or sub-inflammation; and, finally, to the highest degree of excitement, or real inflammation.

Many physiologists conceive, that the primitive movement to all diseases emanates from the sentient system; and that in inflammation, the original morbid irritation is first exerted upon the nerves of a part, and that the subsequent determination to it is only the effect.

Every artery has its accompanying nerve; and the connexion by their respective ramifications is so intimate, that morbid causes consequently readily extend their influence from one to the other; and if the nerves receive the first impression, its effect or irritation is immediately imparted to the capillaries, and a morbid sensibility of the nerves may be continued by the re-action of vascular irritation. It is by attacking these vascular irritations, that relief is often afforded in nervous affections, and so also in mania and hypochondriasis.

Dr. Wilson Philip considers that the power of the blood-vessels may not only be influenced, but be destroyed, by affections of the nervous system.* Perhaps the latter effect takes place in those cases of sudden death, described by Esquirol as occurring in maniacs, which leave no trace, either in the brain or other organ, of the cause, and are erroneously considered to be apoplexy. On the contrary, too great or too much momentum in the flow of

* Inquiry into the Laws of the Vital Functions.

blood will certainly not only influence, but destroy the nervous power, as we see in sanguineous apoplexy.

Physiological experiments prove that an animal can live without a brain, but not without a heart; and in the instance of an acephalous child, we see the animal functions may be carried on without the former. Daily experience proves, that the brain, the seat of the sensorium, sustains great injuries and mutilations without injury to the intellectual functions. Life, therefore, it appears, as well as mind, is more dependent on the movements of the circulation than on the functions of the nerves.

Still, a disorder of the nerves may be, and frequently is, the immediate cause of insanity; for a violent moral impression being made on any of the senses, is first carried to the brain, which immediately acts synchronously with the heart, and re-acts on the brain; and the last action may remain after the other has ceased. The same is seen in many morbid affections: the original induces a second affection, which is sympathetic; and the latter will continue long after the primary cause is removed.

Intense thought or abstraction exercises a powerful influence on the circulation. Great calculators have been known to pass days and nights without sleep, from having been deeply engaged in some intricate calculations. This want of sleep results from a preternaturally increased action of the vessels which supply the brain; and this action, if not relieved, soon runs on to delirium. Such pursuits being the effect of volition, may be suspended ere they proceed to this extremity.

All passions and emotions are said to be modifications of the will; and whenever the will stimulates the brain to violent exertion, the actions of the heart are always responsive, with a force proportionately augmented or diminished, according to the nature of the impression. Thus, joy, anger, desire, &c. increase the energy of the

heart, and accelerate the circulation, and in excess super-induce apoplexy, palsy, mania, &c.; while, on the contrary, fear, horror, &c. diminish the action of that organ, and retard, or rather reflect, the current of blood on the large vessels, occasioning asphyxia, syncope, &c. But in this latter case, when the heart recovers its force, such a degree of re-action is produced, as sometimes either proves fatal to life, or otherwise deranges the intellectual faculties. Therefore, whether the impetus of the circulation be augmented or lessened; whether the blood, propelled by the heart, excite the brain, or the former be excited by the nervous influence of the latter,—still, if life be not extinguished in the conflict, the loss of reason is a frequent effect.

Whenever either of these important organs is preternaturally excited, the relation is so intimate, that a reciprocal and powerful action must be produced. The consequences are obvious; for, agreeably to a law of nature, extended as well to intellectual as to corporeal powers, when over-exerted, a state of relaxation or rest must follow, or a lesion of that power so over-exerted will ensue.

Even when the stimulus which has proved an exciting cause is withdrawn, or ceases to act before any lesion takes place, the extraordinary energy induced is necessarily succeeded by a state of diminished sensibility and weakness, or of collapse, subversive of the mind. It is in this way, probably, that moral or affective causes act on the nervous system.

We find, in a very large class of diseases, such as all the neuralgia, tetanus, spasms of various kinds, asthma, chorea, hysteria, epilepsy, cephalæa, vertigo, syncope, convulsions, carus, asphyxia, catalepsy, lethargus, apoplexy, paralysis, every species of mania, together with all febrile diseases, whether in the simple or graver form, or even in acute inflammation, as phrenitis,—that a mutual

connexion exists; and there are few of these in which the intellectual function is not primarily or secondarily affected. In most, likewise, the sanguiferous system seems as much implicated as the nervous.

Brodie* and other physiologists proved that the circulation does go on, even if the brain and nerves are destroyed; yet no reasoning can reconcile the idea of the intellectual faculties being exercised under such circumstances. The powers of the nervous and sanguiferous systems, as long as both exist, must exercise a reciprocal influence; and, consequently, a change in the condition of one is productive of a change in the other. But the change cannot, as some physiologists assert, be always correspondent; for when the sensorium or origin of the nervous influence suffers compression, sensation and volition are suspended, while the circulation is uninterrupted. When any impediment to the circulation of the blood, either to or within the cranium, occurs, the nervous power is, perhaps, always affected, but certainly not in a proportionate degree; and if the circulation be suspended, the nervous power must altogether cease.

In relation to affections of the mind, Hippocrates expressly notices, that disorders of the nerves, with delirium, arise either from accidental obstructions in the course of the blood, or uncommon determinations to parts primarily affected. Aretæus also mentions too much blood as a cause of mania or fury, and of its being, as well as bile, the aliment of melancholia. Ætius says, that insanity without fever is not from putrefaction, but from too much blood flowing to the brain, and afflicting solely by its quantity, as in drunkenness. Alexander Tralles states, that the proximate cause of insanity is too great determination of blood to the brain; and Actuarius, that if, in hypochondriasis and hysteria, an unequal pulse is

* Philos. Trans. 1814.

observed, a too great plenitude of blood in the head is the cause. Indeed, observations implying that irregularities occur in the sanguiferous system in all cerebral affections, are to be found in most of the ancient authors.

The discovery of the circulation has explained many of the anomalous symptoms of diseases, which heretofore were inexplicable. The labours of anatomy have likewise unfolded the nervous apparatus in a more perfect manner. Multiplied observations and experiments have proved, that although the sanguiferous and nervous systems are, as to their inherent powers, independent of each other, yet that they are intimately associated, and exert a mutual influence; thus strengthening the opinion of the Father of Medicine, that the origin of nervous complaints is to be found in a disordered state of the circulation of the blood.

Inordinate action of the mental functions is directly ascribed by Thomas Willis to disturbance in the circulation primarily affecting the brain, and thence proceeding to the viscera of the thorax and abdomen; and he asserts, that the cause of habitual melancholy is partly in the properties of the blood, and partly in the action of the heart.

Hoffman imputes melancholia to congestion and stagnation of a copious quantity of blood in the brain, which is obstructed in its progress through the vessels. He also ascribes violent mania to a morbid action in the sanguiferous system of the brain, attended with great heat; while phrensy he designates as insanity with fever, from an inflammatory obstruction in the vessels of that organ.

Some have imputed the maniacal action to simple acceleration of the blood; some to congestion and stagnation, which obstructed its progress through the brain, producing a plethora; some to inflammation of the substance, envelopes, or vessels, of the brain, or to irritation;

others to too great thinness; and others to a deterioration of the vital principle of the blood.*

Greding, who was so exceedingly minute in his records of the morbid phenomena of insanity, both in the living and the dead, observes, that the circulation in a maniac always appears to be in commotion, and determined with great force to the brain.† And Crichton confesses, that if he were asked what was the state of diseased brain which produced mental disorder, he should say, that the arterial action of the brain itself was altered from its healthy state; and that as soon as the altered action subsides, the healthy operations of the mental faculties return.‡

The great number who become insane from drunkenness, is a strong proof how much vascular excitement influences derangement of mind. Bayle says, seventy-nine out of 127 lunatics were of the sanguineous temperament, and three only of the nervous.

All the precursory symptoms, as well as those on the actual access of mania, characterise a disorder in the circulation: as headach, or sense of distension; throbbing of the arteries supplying the head; tinnitus aurium; the eyes blood-shot, often prominent and shining; flushed face, and preternatural degree of heat of the scalp; while the extremities are cold, pulse hurried, &c. In some, these signs of accelerated circulation long continue; in others, they are observable only on the approach of a paroxysm, and gradually decline with it.

A state of congestion of the capillary and venous system is a consequence generally of too great determination; and is commonly conspicuous on dissection of the insane.

The dissections of Morgagni, Meckel, Greding,

* Foderé, *Traité du Délire*, tom. ii.

† Crichton, *App.* vol. ii. p. 350.

‡ *Ibid.* vol. i. p. 242.

Haslam, Marshall, Esquirol, Neumann, &c., testify how strongly the circulation is affected in insane persons. Sometimes by mere turgescence of the vessels, or by effusions of simple serum or coagulable lymph, rupture of blood-vessels, or by changes in the structure of the vessels themselves. A diseased state of the coats of arteries has frequently been detected, and traced from their communication with the brain and membranes along their whole course downwards to the aorta. Marshall notices, that the great vessels in the head, and those from the heart upwards also, were generally found diseased in his dissections of maniacs; and he conceived that they became so from disordered vascular action.

Sir Gilbert Blane, in examining the body of a lady who was subject to periodical mania, which terminated in apoplexy, remarked an aneurism of each carotid artery, which filled up the cavities of the *sella turcica*; and to this disease of the arteries he refers all the attendant symptoms, the urgency of which had always been relieved by abstracting blood from the head, purgatives, antimonials, and abstinence.* In this case there was no extravasation of blood to occasion the apoplectic event.

If the larger vessels suffer such changes, the presumption is fair, that those fine vessels which ramify the substance of the brain, and which, from their minuteness, are imperceptible to the eye or the microscope, and through which physiologists assert the most important functions of circulation are carried on, are still more frequently diseased, and take on morbid actions. It is said, that in a ratio with the vascularity of a part is its susceptibility to irritation. In what degree, therefore, must a viscus, so organised as the brain is, be susceptible above all others?

* Trans. Soc. for Med. and Chir. Knowledge, vol. ii. p. 102.

The functions of the nerves depend on a due supply of blood. Whatever interrupts and diminishes its afflux deprives the brain of its natural stimulus.

The functions of the vascular system include not only those of the heart, arteries, and veins, but likewise those of all the vessels conducting the processes of exhalation, absorption, secretion, and excretion, and all the sensible and mobile powers which they possess.

Hence we may appreciate the importance of a due equilibrium in the circulation to the functions of the brain.

It has even been inferred, that in cases where there has been great injury and mutilations of the substance of the brain, and yet the mental faculties have been preserved — that such preservation has been owing to the circulation being still continued in the remaining portion of that organ uninterrupted and undiminished. But this perhaps would be assigning too much influence to the circulation, and detracting too much from the brain as the organ of the mind.

The blood, also, is the pabulum of secretion, and growth, and life; and what it is to our corporeal existence, that it is to the intelligent principle. Excess or defect in quantity is a state of disease both to body and mind. But without a due degree of fulness of blood in the cerebral vessels, the necessary energy of the organ is not communicated. Hence it must be, Cullen says, sufficiently probable, that an over-distension of these vessels may cause a violent excitement.*

But to impart this energy, the blood must be sent to the head with a force greater than to other parts; and if from any cause the impetus is preternaturally increased, the brain suffers generally in proportion with the accelerated motion and increased impulse. On the

* First Lines (1296).

other hand, whatever diminishes either the impetus or quantity of the circulating blood, has a correspondent effect on the nervous system; and from the reciprocal connexion and action subsisting between the vascular and nervous systems, the intellectual organs are also affected, but in different ways.

If hæmorrhage is so copious as to produce exhaustion, or if a sufficient quantity of blood be not supplied by means of the nutritive process, not only the powers of the body, but those of the mind, are enfeebled.

Arterial blood has been transfused from an animal into the veins of another, and the recipient animal always exhibits increased vivacity. Dr. Blundell and many others have recently clearly proved, by the transfusing of venous blood from one human subject to another, that life may be sometimes preserved in the most desperate cases of uterine hæmorrhage. The transfusion of blood from animals into the human subject is productive of agreeable feelings, and great flow of spirits; pushed to an extreme, it has occasioned furious madness and death; under other circumstances, it has cured insanity.*

Pressure on the jugular veins of maniacs, by which the blood in the brain accumulates; or on the carotid arteries, by which the brain is prevented from receiving its usual supply of blood, has, Parry says, while the pressure continued, equally produced restoration of the intellectual faculties.

All these facts fully demonstrate how important a part the vascular system performs in the functions of the understanding.

Let us pursue the inquiry, and examine whether the phenomena of disordered circulation establish a stronger connexion with, or throw a clearer light on, those of insanity.

* Philos. Trans. vol. ii. p. 617.

COMMENTARY VI.

DISORDERS OF THE CIRCULATION.

HENCE it appears, that there are two morbid conditions of the circulation, which, though directly opposed, immediately influence the intellectual functions, and which, whenever they exist, are manifest and frequent causes of deranged intellect: these are, first, when the blood is in quantity or momentum excessive, and, second, when the blood is in quantity or momentum defective.

1. *When the Blood is in Quantity or Momentum excessive.*

Plethora and sanguineous determination to the head are often used synonymously in medical language; but they differ widely, inasmuch as determination may exist without plethora, and plethora without determination. Blood may be sent to the brain with a preternatural velocity, and act simply by augmented motion, but be as readily returned by the veins: this is determination. It may be sent either with a natural velocity, or a degree greater or less than is natural; and from some obstructing cause be not returned by the veins in that due proportion in which it has been conveyed to the brain—accumulation, therefore, occurs: this is plethora.

The latter is rarely a primary cause of insanity, but it often induces apoplexy and hemiplegia, and as a sequel, mental derangement: the former, however, very often originates insanity.

Some able pathologists conceive, that in most maladies

increased momentum of the blood is one important and common link in the catenation of causes. Dr. J. Cheyne goes further, and thinks that it would be difficult to point out a disease which has not its commencement in accelerated circulation.*

However this may be, it appears obvious to me that the phenomena which precede the numerous class of maladies affecting the sensorium and mental faculties, are more or less complicated with disorder of the circulating fluids.

The impulse is not always direct to the brain, but sometimes to remote parts, and the brain is implicated by sympathy only; and very often, such determinations are suddenly transferred to that organ.

The facility with which excessive determination of blood to the different organs and parts of the body occurs, and the different local morbid actions thereby induced, we daily witness. But of all parts, the head is certainly the most likely to be overcharged with blood, both from the numerous causes, moral and physical, which accelerate its impetus, and from the mechanical impediments presented to its reflux.

External heat (insolation), violent exercise, certain aliments, alcohol, stimulating medicines, mental emotions, mechanical injuries,—all operate on and excite the sanguiferous system. Any of these stimuli are capable of producing all the diseases usually denominated *nervous*, most of which originate in a disordered state of the circulation, and may precede, be connected with, or are convertible into, actual insanity.

Delicate persons, of a nervous temperament, are most prone to vascular excitation; and so are they to insanity. Neither are those of similar temperament, though of much stronger fibre, exempt from such excitation. Nor

* Essay on Hydrocephalus, p. 57.

should it be forgotten, that in all these irritable systems, the maniacal diathesis may be suspected to be latent.

Whether the exciting cause be the result of a moral or a physical impression, still this difference obtains: moral or affective causes produce more sudden and less permanent effects than physical. Sanguiferous determinations supervening on the former, subside sometimes as readily as excited, or with their cause; but when emanating from the latter, they do not cease but by restoring the balance of the circulation. The results of such determinations, however, whether they are temporary or permanent, may be the same. The impetus being given, may occasion delirium, or mania, or apoplexy, or various other cerebral affections, or death. And when mania is thus elicited, like all other morbid actions once generated, it may long continue, when that in which it originated is removed, or has ceased.

No symptom is so uniform in all incipient or recent cases, whether of mania or melancholia, as a preternatural heat of the scalp; while, usually, the heat of the surface of the body, or the extremities, is below the ordinary temperature. This symptom originates in partial determination to the head, and nothing is more common in insanity. Mason Cox remarks, that there generally exists a degree of plethora about the heads of maniacs, and frequently when other parts of the system are in a state of exhaustion and debility.*

Delirium is the symbol of insanity, as well as of fever and other acute diseases.

But it has been argued, that mere determination to the head, is not, more than accelerated arterial action, the cause of delirium; because in various states where both are manifest, as in severe exercise, fevers, &c. in which the pulse is excessively quick, and the

* Pract. Obs. on Insanity, p. 30.

face flushed and full, no such phenomenon occurs;* and because that the delirium, in many cases of fever and frenzy, begins when the pulse is very little quickened, and often continues when its velocity has subsided. This is very true; but although delirium or insanity may not always be referred to fulness of blood in the brain, or to increased impetus in the heart's motion, yet it does not thence follow that there is no increased momentum in the circulation of the brain; for, in local inflammations, there is often indubitable increased local vascular action, without any or little disturbance of the general circulation. Why, therefore, should not an increased local action be maintained in the brain, as well as in other parts, without a quick pulse, or the ordinary marks of determination to the head? In fact, nothing is more common in mental derangements than to find extraordinary heat of the scalp, throbbing arteries, and suffused eyes, and the pulse quite calm; and dissection repeatedly proves that such increased action in the brain had been going on, when no symptom, while the patient lived, indicated it.

That mania, amounting to fury, and even to death, may be positively produced through the mere medium and motion of the blood, there is decided evidence in the remarkable experiments on the transfusion of blood by Dionis.†

In one instance, where its effect was tried on a man who had been afflicted with periodical mania for seven or eight years, and who had had no sleep for several months, the experiment was attended with complete success.‡

* Crichton's Inquiry, vol. i. p. 165.

† Cours d'Oper. de Chirurg. p. 498.

‡ This case is so curious and apposite, that I shall not hesitate to transcribe it:—"About ten ounces of blood being taken from the arm, five or six ounces of a calf's blood were transfused into the veins. The

The effect upon the insane of diminishing the momentum of blood towards the brain, is another proof how much the afflux of that fluid influences the operations of the intellectual faculties.

Parry's experiments, by compressing the carotid arteries in various cerebral disorders, and of suspending the paroxysms of mania so long as the pressure was continued, tend to prove this fact.*

John Bell discredited the effect of these experiments, and suspected Parry to have been mistaken in his belief that he had stopped the circulation through the carotids,

man swooned; but on reviving, he was the same as before. Next morning he was more tranquil. Two days afterwards, three ounces of blood were abstracted and a pound was transfused. During the operation, he described a sense of heat along the arm, and passing under the axilla. The pulse rose. A plentiful sweat on the face followed. At this instant the pulse varied, and he complained of pain in the kidneys, was sick, and felt as if he would choke. When the blood was stopped, he vomited up the meat he had previously eaten, and felt an urging to urine. After straining and vomiting for two hours, he fell asleep, and slept ten hours. He awoke calm, and in possession of his mental faculties; but complaining of pain in his limbs, and lassitude. The urine he voided was as black as soot. He continued sensible, but sleepy all that day. On the following, his urine was of the same colour, and he bled freely from the nose. The succeeding day he was still sensible, and his urine began to resume its natural appearance."—Philos. Trans. vol. ii. p. 617.

The syncope and variation of the pulse, the increased heat and succeeding sweat, the determination of the received blood to the kidneys, and the sympathetic affection of the stomach, the consequent repose of which he had been so long bereft, and, lastly, the restoration of the mental faculties,—all follow the experiment in the order our physiological knowledge and inferences would lead us to expect.

Although there is no exact description of the symptoms of the maniac's case, except want of sleep, yet it demonstrates the direct influence of the sanguiferous system on the intellectual faculties, and raises the presumption that some error in the circulating medium was, in this instance, the proximate cause of the insanity.—B.

* Lond. Med. Mem. vol. iii.

by the pressure he applied.* The good effects of tying the carotid artery on the side in pain, in the ordinary headach, attended with throbbing of the carotids, has since been shewn by Sir Astley Cooper and Mr. Travers, and the results in some degree confirm those of Parry.†

However this may be, a marked and very visible pulsation of the carotids is not an infrequent precursory symptom of mania, and even of melancholia. It sometimes may be observed in other cases. In a cataleptic maniacal female, whose case I shall hereafter detail, previously to the cataleptic symptoms arriving at their acmé, the pulsation of the carotids was always strong, and discernible by the eye.

In some recent cases of mania, attended by severe headach, and evident determination of blood to the head, while pressure was continued on the carotids, I have found there has been a partial, though not a complete suspension of the symptoms. In one young woman, liable to sudden and furious maniacal paroxysms, if the coming on of the premonitory pulsation of the carotids were watched, and pressure by the thumb was applied, the paroxysm was either prevented or moderated.

Very delicate young females are more subject to cephalic pains than the more robust and plethoric, often arising from excessive determination to the head. But from their appearance, such a cause being unsuspected, a stimulating plan of treatment is often adopted; and hence insanity is a frequent consequence. In these subjects, however, I have observed the vascular system to be very fully developed, generally accompanied by much nervous irritability.

Many diseases induce conditions in us opposite to those upon which themselves depend, and often thus effect their own cure.

* Principles of Surgery, vol. ii. p. 256.

† Medico-Chir. Trans.

Sydenham mentions a species of mania supervening to an endemic intermittent which prevailed. This, *à priori*, might seem to militate against the conclusion, that insanity is generally consequent to an over-excitement of the vascular system. But experience shews there is nothing in this fact inconsistent with the course of these disorders. High inflammatory affections, such as pleurisy, &c. are well known to succeed those intermittents of paludal soils which produce the most marked effects of debility; and, *vice versâ*, intermittents sometimes supervene in a day or two on the removal of pleurisy.* The former occurrence was so common in Zealand, that it is noticed by Drs. Blane, Borland, and Lampreire, in their report to the British Government on the sickness of our troops in that country, in October 1809.

Hence we may suppose, that after sustaining a severe ague, which always leaves a great degree of debility, a re-action consequently follows, totally subversive of that equilibrium in the balance of the circulation which constitutes a state of health; and this inordinate action may either produce actual inflammation and delirium, or delirium without inflammation, or, in other words, insanity.

The phenomena of fever and those of insanity differ in every thing but the mystery in which their causes are involved. Still, they are both morbid actions of the system, and illustrate the physiological axiom, that nature will not suffer two morbid actions to proceed together. Thus, the appearance of a disease, when another is already in progress, will suspend the original disease, which will again resume its course when the intruder has finished his. An attack of mania will suspend asthma: in several cases of pulmonary consump-

* Trans. Soc. for Improving Med. and Chir. Know. vol. iii. p. 538.

tion, when the patient was in the last stage of exhaustion and debility, and life fast ebbing, I have witnessed an access of mania restore the patient to instant strength, all former symptoms being suspended; but when, after months' continuance, insanity has ceased, the pulmonary symptoms have re-appeared, and death immediately closed the scene.

The effect of a new morbid action in superseding another already existing, is in no instance more forcibly exemplified than when fever, spontaneous or artificial, supervenes on insanity. Nor, perhaps, can stronger proof be adduced of the effect of the circulation on the intellectual faculties.

Fever is a very common termination of a maniacal attack; and it will have this effect in cases where the condition of the circulation materially differs. In some insane persons, the impetus of blood to the brain appears to be constant; in some, it is occasional only; in others, it is deficient, and the brain receives too little blood.

If an access of pyrexia do not effect a permanent cure, yet sometimes, so long as this new action continues, the understanding has been perfect, or much improved.

The essence of fever is probably increased action in the vascular system, however that may have originated. When, therefore, an attack of fever removes insanity in any of the three conditions of the circulation referred to, we may infer, that in the first it relieves, by the new morbid action being more powerful than the existing one, and thereby superseding it; in the second, by equalising the deranged balance of the circulation; in the third, by imparting such a degree of momentum to the arterial impulse that sufficient blood is carried to the brain to restore its deteriorated energies.

The most powerful remedies prescribed for the cure of insanity act by inducing artificial fever, *i. e.* by creating such an excitement in the system as increases the

impetus of the circulation : of these, exercise, the bath, mercury, antimony, and tonics, are examples.

The first effect of accelerated circulation is to increase the activity of the brain. This is often remarked on the accession of simple fever, as well as of incipient inflammation of certain parts of the encephalon. As sensation is more acute, the imagination becomes more vivid, and deprivation of sleep follows ; and if the patient sinks into a momentary slumber, frightful images present themselves, and exhibit all the phenomena of delirium.

An attack of typhus has, while it continued, restored reason, and even recollection, in cases of long-continued insanity ; though, upon the subsidence of the fever, insanity has again recurred.

Mr. Tuke mentions a case of a woman who had been fatuous for years, and who, being attacked with typhus fever, recovered a perfect recollection of persons and events ; and who, upon the subsidence of the fever, was precisely in her former state of mental alienation.* Other authors refer to similar effects, though their histories of the cases of insanity are rarely sufficiently exact.

Recovery of reason from the intervention of fever is so common, that I shall quote only one instance in my own practice.

A gentleman, aged forty-five, in a state of melancholia, with a strong propensity to suicide, was walking with his keeper on Battersea Bridge. By a sudden effort he broke away, and jumped over into the Thames. It was on a Sunday, and as many boats were passing on the river, assistance was immediately given ; but he resisted so much, that it was only by main force he was taken out of the water and conveyed to his residence.

Having some distance to go in his wet clothes, he caught a violent cold, followed by rigors and a smart

* Description of York Retreat, p. 137, in notâ.

fever. For this, I prescribed suitable remedies ; but I took no notice, nor made any inquiry of him respecting his late rash attempt to destroy himself. During the fever, he was quite docile and collected. When it had subsided, I reasoned with him on the subject. He confessed himself horror-struck on the reflection of the act he had committed, and entreated I never would again mention it. In fact, his mind was entirely free from all delusion ; and in a fortnight he returned home cured, and has remained well ten years.

Persons of weak intellects, and even in a state of dementia, when that condition was not connate, or from mechanical injury, have, from an attack of fever, been known not only to be restored to reason, but to have acquired a degree of shrewdness exceeding their original capacity. Willis has an axiom, “ *Interdùm febris quosdam stultos et stupidos sanavit, et acutiores reddidit;*”^{*} and he cites several cases in proof of it.

It is highly probable, that in fatuous persons the brain is, according to Cullen’s definition, in a state of collapse ; and as fever itself may be a re-action, a febrile attack produces the salutary effect of restoring, permanently or temporarily, the wonted energies of the brain, and consequently the intellectual faculties.

The action of mercury inducing salivation, which is a temporary state of febrile excitation, has cured insanity.

Memory, consciousness, and even a certain degree of ratiocination, often return just previous to death in those who have been deprived of almost every sentient or mental faculty.

True hectic fever always improves the mental powers. Percival, in illustration, mentions a case of fatuity subsisting from infancy, and nearly approaching idiocy, which, after thirty-four years’ continuance, ended in

^{*} De Stupiditate, p. 190.

consumption, of which hectic fever was of course a concomitant. Towards the fatal close of this case the patient actually displayed a great degree of intellectual vigour.*

The most remarkable case of this kind is one related by Dr. Albert. A young man, after he had been in a furious delirium for seven years, in the course of two days sunk into a complete state of idiocy. He maintained a squatted position, with his legs continually bent over his thighs, the articulation of the knees and hips having become anchylosed. The heels, by constant compression, appeared to be buried in the buttocks; and his cheeks, which reposed on each knee, between which his head was placed, seemed to have ceded to the permanent pressure they sustained. After fifteen years passed in this miserable state, he suddenly returned to consciousness and a knowledge of his existence, and of objects and persons surrounding him. But this was the signal of approaching death, which followed in five days. He recovered also his voice in this interval, and complained of an obstruction in the gullet, which hindered him from swallowing.

This unhappy being had not only experienced as great disorder of intellect as was possible, but had also undergone as great a physical change as the human body, while endowed with the vital principle, is susceptible of; for, besides being degraded from all those attributes of man which reason and form bestow, his very substance was changed. His whole body was remarkably blanched, and had the appearance of wax or adipocire, and looked in every part almost diaphanous, while each member was shrunk and atrophied.†

This temporary recovery of reason and reminiscence has often been adverted to as a proof that mind is inde-

* Works, vol. ii. p. 339, ed. 1.

† Annales Cliniques de Montpellier, tom. xliii.

pendent of matter. But this phenomenon is perhaps capable of explanation without recourse to occult causes or metaphysics.

Preceding the dissolution of such maniacs, symptoms indicative of some increased action of the nervous or vascular system are apparent. Many, no doubt, die suddenly, in whom no change in the functions, mental or physical, is perceptible. But when the decline is gradual, this sudden recovery of reason is not uncommon. As the powers both of the nervous and vascular systems are mutually exhausted by long-continued action and re-action, and as some degree of vascular excitement generally comes on just at the last crisis, a fresh, though feeble and fleeting impulse is thereby imparted to the nervous system; and thus, the balance being temporarily restored, a condition of the brain essential for the right exercise of the intellectual faculties is recovered. This restoration, however, of the mental powers is at the expense of the vital powers; for death soon closes this transient effort.

Accelerated circulation, therefore, operates according to the state of health of the organ: in the healthy brain it may produce functional derangement; in the morbid brain, restoration of its functions.

If fever occasionally remove insanity, it sometimes fails to produce any effect at all on a disordered mind. This perhaps may also be accounted for. In some, the cause of insanity is only a simple morbid action of the brain, sympathetically induced, of which dissection affords no trace; in others, a temporary lesion may attend; and in others, cerebral disorganisation. Hence fever in the first case may effect a perfect cure; in the second, the new or febrile action, while it lasts, overcomes the existing morbid action, but which again prevails upon the exciting power ceasing; while, in the third, no adventitious cause, however excitant, can remedy the organic lesion.

2. *When the Blood is in Quantity or Momentum defective.*

It being manifest, that a certain quantity of blood is requisite to give energy to the functions of the brain, it is equally so, that if, from defect in the process of sanguification, or of momentum in the arterial system, a due supply be not given, the cerebral functions cannot be properly performed. That such deficiencies, both in the supply and motion of the blood, do frequently occur in certain forms of intellectual derangement, is evident.

Such is the case of those in a state of demency or fatuity. All extenuating diseases, excessive or long-continued evacuations, whether from hæmorrhages, alvine dejections, urine, perspiration or ptyalism, venery, and especially the odious and exhausting practice of masturbation, or deficiency of nutriment, are adequate to this effect. The structure and incapacity of the cranium itself, either to admit or contain a sufficient supply of blood for the full development of the intellectual organ, has been supposed to be a cause of positive idiocy.

Sydenham mentions a peculiar species of mania, which was the sequel of inveterate intermitting fevers; and which, he says, contrary to all other kinds of madness, would not yield to plentiful venesection and purging, but the reverse—slight evacuations produced the relapse of a convalescent, and violent ones inevitably rendered the patients idiotic and incurable.*

Although we cannot admit this celebrated physician's theory, that all other kinds of madness proceed from "too great spirituousness and richness of the blood," and this particular one from its "state of depression and vapidness from long fermentation,"—yet it is clear, that this accurate observer of disease was correct in principle—that is, that in common insanity the condition of

* *Observ. Med.*, sect. i. cap. 5.

the blood and circulation are very different from what they were in the peculiar species he describes. Both the quality and quantity of blood were in this case doubtless much deteriorated; and the *vis vitæ* also so much diminished, that the action of the heart was incompetent. Hence, the brain being deprived of the necessary stimulus, a state of atony ensued.

A deficiency in the supply of blood first deteriorates the corporeal, and then the mental faculties, and finally extinguishes both.

Haller,* Boerhaave, Vogel, &c., among the causes which affect the reasoning powers, refer to a deficiency of blood to the encephalon.

Persons exhibit, in particular forms of mania, a peculiar pallor of the skin, accompanied with such extreme emaciation, that a deficiency in the supply of blood is strongly indicated. The capillary vessels on the surface seem completely exanguined; and the frequent insusceptibility of such patients to all external sensations, seems to imply that the circulation in the cutaneous vessels is so languid as to have impaired the nervous power and influence.

This pallor of the complexion, and tabid state of the body, may originate in a morbid condition of the mesenteric glands; for, in the bodies of insane persons much extenuated, these glands will generally be seen greatly enlarged. But this condition is observed in maniacs in whose bodies neither the mesenteric glands, nor any of the abdominal or thoracic viscera, are perceptibly diseased. Probably, in such cases some gastric disease might exist, and the powers of assimilation being impaired, the supply of blood necessary to sustain the proportions and muscular force of the body, and the energies of the mind, is inadequately furnished.

* *Physiol. Oper.* p. 563.

Whenever the supply of blood is deficient, and a state of marasmus and atony succeed, violent actions of the vascular system are not to be apprehended. But when in this enfeebled and atonic state, if a large quantity of stimulating food be taken, and the strength is suddenly recruited, the quantity and impetus of the blood is also suddenly increased; re-action then follows, and perhaps in such excess, that comatose affections and mental disorders will return where they have recently existed, and arise where they have not before been known.

Thus it was observed by Morton, that apoplexy and palsy were much increased in London as the frequency of extenuating agues diminished.

All cerebral affections are readily induced by causes which debilitate the system.

Some time ago I attended a lady, aged between thirty and forty, who, for a severe gastric affection, had been put on a very spare diet. She found benefit from it; but long after it was necessary, she unadvisedly persevered in the plan, till she was reduced to such a degree that she could not support herself, and was obliged to be carried. The physician consulted, very judiciously recommended a cautious return to a more nutritive diet. This plan she embraced as eagerly as the former; and finding comfort in it, took food to repletion; and from none, drank three or more glasses of wine daily. She rapidly recovered her strength and flesh; but with improved health, her friends perceived an unbounded flow of spirits, greater indeed than she ever before possessed. Soon, her conduct and conversation became rather singular; and a few days after, a furious paroxysm of mania followed. The mania has now continued several months.

Persons greatly emaciated from long deprivation of proper food, if they indulge suddenly to the extent of their appetite, have experienced madness and death.

Mental derangement does not occur in that singular disease the *pelagra*, which is endemic among the peasantry of Lombardy, till that stage when the greatest degree of extenuation and debility, and lesion of all the voluntary powers, have taken place: then the senses are deranged; and some are raving, some melancholy, others fatuous, and a strong propensity to self-destruction by drowning predominates.

Dr. Holland ascribes the origin of this disease to a bad and deficient diet, producing a cachectic habit of body.* Strombio's dissections of the bodies of those who died of the *pelagra*, support this conclusion; for there was no perceptible morbid alteration in the encephalon of any case, excepting one.† But there was visceral disease in all, as might be expected from the nature of the causes inducing the malady.

Rahn could find neither sanguineous effusions nor marks of active disease in the heads of those who had died apoplectic, in consequence of fatal intermitting fevers.‡

Many other instances are recorded of endemic insanity, which, although varying in character, yet appear to have originated in local situation, habits, or diet, contributory to a cachectic state of body.

That peculiar condition of the brain denominated softening, and which renders it unfit for the purposes of intelligence, is supposed by Dr. Abercrombie to arise from a deficiency in the supply of blood.

Excessive evacuations of blood, whether natural or artificial, necessarily produce diminished momentum; one of the effects of which is, to impair the intellects; and, if continued, it will subvert or extinguish them; the decline of the reasoning powers being generally in a ratio with

* Med. Chir. Trans. vol. viii. Part II.

† De Pelagrâ, 1787.

‡ De Miro Capit. et Abdom. Consensu.

those of the vital powers. Indeed, indiscriminate and routine depletion has, in all cases of mania, been attended by inevitable fatuity. Hypercatharsis, long and injudiciously persisted in, will have the same consequence.

A deficiency in this material of growth, secretion, and mental energy (the blood), produces a shrinking and flaccidity of muscular parts, and many other corporeal changes; and, finally, explains many phenomena exhibited in insane persons.

Amenorrhœa, so frequently attendant on insane females, is often from a defect in the quantity of blood, rather than from an obstruction to the secretion. The attempt, therefore, by emmenagogues, &c. to cause menstruation, when the constitution does not afford by the sanguiferous process a sufficient supply of the material, is vain.

Constipation, so common a symptom with the insane, may also be occasioned by the want of a due supply of blood; and, consequently, of a due momentum in the arterial system of the intestines, by which the regular peristaltic motion is not preserved throughout the whole of the canal.

COMMENTARY VII.

ANOMALIES IN THE CIRCULATION.

THERE are other phenomena conspicuous in the insane, which clearly demonstrate anomalous actions in the circulation. In all cerebral affections, perhaps, they exist; but in those where the mental functions are deranged, irregularities in the arterial movements are as common as they are inexplicable.

However dissonant it may be with the general laws of the circulating system, yet it is indisputable, that the motions of arteries differently situated vary both in the correspondence and force of their pulsations, and that in insanity these discrepancies are equally frequent and obvious.

Sometimes the beat of the radial artery differs in number and strength from that of the carotids; the carotids from each other; and both or either from that of other arteries. The preternatural force, as well as the irregular stroke of the carotids, is oftener detected in insane women than in men. Doubtless, these are equally common in both sexes; but as women rarely have their throats covered, and men almost always have, these pulsations are of course more liable to be seen in the former. Usually, the irregular action is in one carotid only; and if the pulsation of this be noted, its discordance with the velocity and power of other arteries is detected.

As the pulse is, in all severe cerebral disorders, a more equivocal sign than in any other morbid condition, so likewise is it found to be in trivial nervous affections. Even in inflammation of the brain, it may be quick,

slow, depressed, small, or full, according as the attack is characterised by acute pain, delirium, stupor, or other concomitants, and according to the part of the encephalon which is the seat of it; and in cases which are called nervous, where no symptom indicates acute disease, and there is little real disorder, the pulse will present the most extraordinary varieties.

Some individuals are reported to possess a controlling power over the circulation, so as to accelerate or retard the radial pulse. If this be a fact, I should suspect that the insane would be able to exercise such an act of volition with less facility than the sane.

It ought to be noted, that the pulse of a maniac is often singularly influenced by his feelings; so that we should always be extremely cautious how we judge his case from this index.

Many insane people have such an astonishing command over their features, that they effectually disguise the perturbation which reigns within. But while under these suppressed feelings, there is an infallible token of the internal disturbance this constraint excites. If in this state the patient's pulse be felt, it will be found to beat with extraordinary rapidity, and generally with a bounding and irregular stroke. Wait a little, and repeat the examination of it, and the same sort of pulse may continue. But again, let the finger be placed on the artery, and the attention of the patient in the meantime be diverted to some indifferent object; or let the examination be made at the end as well as at the commencement of the visit, and a very different pulse will present: being no longer under the guidance of volition, it will resume its wonted course.

Notwithstanding the command thus assumed over the features, speech, and actions, the real state of an insane person's feelings may often be detected by the motion of the pulse. The degree of nervous irritation is gene-

rally so high, that no management during the space of a visit can subdue the excitement and accelerated pulsation. This preternatural arterial action, no doubt, proceeds from a mental impression through the nervous system. Sometimes, perhaps, from dread or repugnance to the examiner; but oftener from that strong desire, inherent in almost all insane persons, to deceive, and appear otherwise than they know themselves to be. This condition of arterial action is the simple effect of suppressed emotion.

Ignorance of the power of suppressing and concealing their emotions, has often led to the suspicion of the abolition of the sentient principle in lunatics; and because they have not complained of extremes of temperature, or the pain of wounds, whether self-inflicted or accidental, a similar impression has obtained. But these are conclusions equally fallacious and dangerous.

But irregularities and discrepancies in the arterial action exist where the will is entirely passive; and in such case they appear to arise from some morbid irritation, producing a local effect on the blood-vessel.

Dr. Mason Cox observes,* as a peculiarity worthy of attention, that in insane persons the pulse in the radial and carotid arteries sometimes differs, and when soft and weak in the former, is full and hard in the latter; but he makes no remark on the inequality or want of correspondence in the number of pulsations in these vessels.

Numerous and striking examples of different anomalies in the circulation are recorded. Parry, especially, has referred to many singular deviations. They are notable both in mania, where the system is highly excited, and in melancholia, where all the vital functions seem almost atrophied.

* Pract. Observ. on Insanity, p. 7.

All these anomalies strongly indicate an influence of the nerves on the circulating vessels, independent of that which they are known to exercise upon the heart.

My own experience has furnished numerous examples of these anomalies in the arterial action of insane persons. In some, these irregularities in the circulating system are precursors of the maniacal paroxysm, and frequently continue, if it be a temporary paroxysm, till it ceases.

A young woman, aged twenty-four, experienced a pecuniary loss, which affected her health and suppressed the catamenia. Soon after, a severe attack of mania followed. Before the approach of a paroxysm, the pulse was greatly accelerated. In the course of a few hours, the pulsation of the right carotid became so strong as to be visible to the eye. While the stroke of the radial artery was 90, that of the carotid was 115 or 120, but irregular in force. At the same time she complained of a great rush of blood to the head, with a whizzing noise in her ears; afterwards the temporal arteries began to beat with greater force and celerity; and presently she became completely and furiously deranged.

Many similar instances might be quoted. In a case of catalepsy, complicated with insanity, to which I shall have occasion to refer, it was singularly conspicuous.

In persons of a very nervous temperament, temporary and remarkable deviations in the radial pulse take place from the sudden occurrence of very trivial causes; for in proportion to the sensibility of the nervous system so is that of the vascular.

This discrepancy in the pulsation of different arteries has also been remarked when the apoplectic, epileptic, or hypochondriac diathesis prevails. In delicate girls also, subject to chorea, hysteria, &c., it is often observable; and so likewise in many other diseases which nosologists class as *neuroses*. These anomalies in the circulation are not always sudden or transient, but are

frequently constitutional, and the economy of the system is in no other way disturbed, — a fact particularly important to remember in the treatment of insanity, as well as of every disorder complicated with it, since all are of the same family.

Neither must this irregularity in the arterial system be confounded with those local determinations of blood which occasion fulness, heat, and strongly bounding arteries in one part, while in others the stroke is weak and small, attended with coldness and paleness of surrounding parts, as in erysipelas.

The facility with which all these irregularities in the circulation are produced by emotions of the mind, is a strong reason why lunatics of this highly nervous constitution should be abstracted from all associations likely to excite them.

Insanity sometimes assumes a periodical or intermitting character; and every returning paroxysm will commence with vascular excitement and irregular arterial action.

The following is a curious example of irregular periodical mania, attended with the most marked anomalies in the circulation: —

A gentleman, aged twenty, of a dark complexion, and hereditary predisposition to mania, was placed under my care. The history of his case given me was, that when he was ten years old he had the scarlet fever, and from that time had been subject to a sanious discharge from his left ear. Before he was fourteen he had undergone a course of mercury for a venereal complaint. Very soon afterwards he became insane. He was placed in an asylum, where he was much neglected. He remained there in a variable state two years, and then recovered. Shortly after, he was very much alarmed by the horrible murder of the Marrs, at Ratcliffe, near which he then lived: the effect was a recurrence of

mania. He remained insane three months, and then recovered and went into the country. He continued sane about a year. Six months after his return home, he again contracted a venereal complaint; mercury was exhibited, and insanity recurred. He recovered again; but from this period he became insane repeatedly, and was as often the inmate of an asylum. He was twice infected with scabies, which each time was hastily cured by some external application.

The attack of mania had now become periodical, and it was said usually came on every month; but I found afterwards that the periods were uncertain.

I saw him first during a lucid interval. He was very cheerful, intelligent, and well informed, considering the interruptions his education had experienced; his manners and sentiments were very correct, and his general health apparently excellent.

He came into my establishment April 11th. The paroxysm was expected to recur about the end of the month.

Wishing him to continue uninfluenced by any restriction or medical remedy, he was left to himself; but I watched him very closely to mark the first symptoms of the expected attack.

25th. — His spirits appeared higher, and he talked more than before.

27th. — More elated, and talkative. Eyes looked brighter; bowels confined; pulse a little quicker than natural.

28th. — Went to church. On his return told me the text and subject of the sermon, and made many just remarks. Talked quicker; used more gesticulation in speaking; eyes very sparkling; and he was disposed to laugh at trifles.

29th and 30th. — He occupied himself either in writing letters or poetry, or in spouting. Some of the

letters were on business, more on love, and his compositions were very correct, but highly impassioned. All the corporeal symptoms were increased; his tongue was getting white; bowels obstipated; pulse 100; and he acknowledged he felt some pain and confusion in his head.

May 1st. — Rather incoherent. He was incessantly employed in tracing his alliance with various great families, and in forming a genealogical table to prove his pedigree from Noah. The ingenuity he displayed in his arrangement was admirable; and he pursued his labour with such ardour, that, if interrupted, he became rude and rather violent.

All the symptoms of excitation were much augmented; the head was hot, the countenance flushed, and also the nose; the eyes luminous; the pulse 120; white tongue; great thirst; bowels very constipated; appetite and sleep gone. The temporal arteries beating strong. If asked whether he was in pain, he pointed to his head; but he would answer no question not connected with the subject which engrossed his attention.

3d. — This appeared to be the critical day. Every symptom before described was aggravated to the highest degree; the head intensely hot, and extremities cold as marble; the face a dark red, and the nose inflamed and shining, like gout; the heart beating violently; the pulse at the wrist too rapid to be counted; the pulsation of the carotid arteries visible through the integuments of the throat, and very quick. His speech became an eternal indistinct babble, attended by a copious flow of saliva. He was sometimes singing, sometimes laughing, and occasionally referring by signs to his head. Lost to all decency.

5th. — Speech perfectly unintelligible, but vociferous; knows nobody; volition extinct; evacuations involuntary;

pupils dilated, and perfectly insensible to the strongest light; pulse sunk to 60, and very weak; expression very idiotic; face not so red.

7th.—He was now in a perfect state of fatuity, and lost to every sense. His lips were constantly moving, as if in the act of speaking, but no sound was audible. The extremities still very cold, and the pulse scarcely to be distinguished. He had not the power of moving a limb, but seemed reduced to the lowest ebb of automatic life.

From this state of mental and corporeal alienation he gradually recovered. The circulation gradually resumed its wonted course: his pulse rose by degrees to the natural standard; and all his functions daily improved. His recollection was not entire till the 14th of May. By the 19th he was perfectly restored. No trace was left on his memory of what had passed during the paroxysm.

He continued in my establishment till the February following, experiencing similar attacks about every six weeks or two months, with very little variation in them, except that, when at the acmé, he was sometimes mischievous; and that the progress and decline of the paroxysm occupied more or less time.

I then lost sight of my patient; but in about ten months he spontaneously recovered. Adult age seems to have checked the propensity to the malady, as I frequently saw him afterwards in good health.

Though out of place here, I will mention, that no prescribed remedy or plan produced any amelioration of symptoms, or retarded the paroxysms in this case. On the approach of one paroxysm I tried the effect of depletion by bleeding; once by division of the temporal artery; by section of the jugular vein; and locally by scarifying and cupping. But all the symptoms were more exas-

perated by loss of blood; and the state of debility which followed was so great as to protract his return to the degree of mental and bodily health he had always enjoyed during the intervals.

Here, inordinate vascular action annihilated for a time the nervous power, and left the patient in a perfect state of exhaustion. Generous diet, the shower-bath, and tonics, speedily restored his strength.

In tracing and exposing these various morbid conditions of the sanguiferous system, and their influence on the cerebral functions, it is by no means implied that the morbid conditions of the nervous system and their influences should be disregarded. But the latter having already been by others amply considered and discussed, I have on that account endeavoured to place the former in a more prominent point of view.

There are many other phenomena in the circulation, which, whether investigating the causes, or merely examining the symptoms of intellectual disorders, claim attention.

Besides, there are also various diseases that originate, are complicated with, or have an immediate affinity to, insanity, and which have hitherto been slightly noticed.

Under this impression, I shall extend my observations.

COMMENTARY VIII.

HÆMORRHAGIC DISCHARGES.

VARIOUS sanguiferous discharges, whether periodical, occasional, or accidental, greatly influence the functions of the mind. Some, by their suppression operating as exciting causes; others, by their flux proving critical. Among these are classed, 1, the menstrual — 2, hæmorrhoidal — 3, varicose — and, 4, nasal and other hæmorrhages. These are all complicated with the functions of the circulation, though the menstrual can scarcely be ranked with the others, since it is one of the most important natural functions, — while the rest are all morbid actions of the vascular system.

1. *Menstrual Discharge.*

Every body of the least experience must be sensible of the influence of menstruation on the operations of the mind. In truth, it is the moral and physical barometer of the female constitution. Both the accession and subsequent regularity of the menses depend on the due equilibrium of the vascular and nervous systems. If the balance be disturbed, so likewise will be the uterine action and periodical discharge; though it does not follow that the mind always sympathises with its irregularities so as to disturb the cerebral functions. Yet the functions of the brain are so intimately connected with the uterine system, that the interruption of any one process which the latter has to perform in the human economy may implicate the former.

Whether this evacuation be delayed beyond the period when it ought to appear, or be obstructed after being once established, or a female be arrived at the critical age when it ceases entirely; or whether the state of utero-gestation, or parturition, or lactation, be going on, they are all conditions in which the vascular system is involved.

When the menses are stopped, a sudden or gradual plethora sometimes follows in a system long accustomed to the discharge, and a consecutive local determination to some other part often ensues.

Ere the system accommodates itself to this innovation, the seeds of various disorders are sown; and especially where any predisposition obtains, the hazard of insanity is imminent.

The state of utero-gestation is a state of local determination, from which the general system seeks relief by uterine hæmorrhage. Or sometimes this local determination influences the nervous system, and superinduces those phantasies called longings, which are decided perversions or aberrations of the judgment, though perhaps the simplest modifications of intellectual derangement. These anomalous feelings have been referred to uterine irritation from mere gravitation, and so they may be; but they first induce a greater determination of blood to the uterus and its contents, and then to the brain, through the reciprocal connexion and action existing between the two organs.

Amenorrhœa or obstruction of the menstrual flux is, however, by no means so frequent a cause of insanity as is supposed. I am quite convinced that amenorrhœa is oftener a consequence of cerebral disturbance; for in numerous cases, derangement of the mind precedes the menstrual obstruction, and the discharge returns as the functions of the brain and other organs return to a healthy state. Emmenagogues, therefore, and other remedies

given in insanity (vulgarly) to force the menses, may do a great deal of mischief.

Before any remedy is prescribed with this view, it behoves us to ascertain whether the amenorrhœa should be considered as a cause or an effect of the mental derangement. That it is often a cause there can be no doubt; because terror, the sudden application of cold, &c., have occasioned the instant cessation of the menses, upon which severe cerebral affections, or instant insanity, has supervened; and the senses have been restored with the discharge.

The critical period, as it is called, when menstruation ceases, is certainly a period favourable to the development of mental aberration. The whole economy of the constitution at that epoch again undergoes a revolution. The moral character, at the age when the menses naturally cease, is much changed to what it was on their first access; and every care or anxiety produces a more depressing and permanent impression on the mind. There is neither so much vital nor mental energy to resist the effects of the various adverse circumstances which it is the lot of most to meet with in the interval between puberty and the critical period.

Besides, as an author has observed, the age of pleasing in all females is then past, though in many the desire to please is not the less lively. The exterior alone loses its attractions, but vanity preserves its pretensions. It is now especially that jealousy exerts its empire, and becomes very often a cause of delirium. Many, too, at this epoch imbibe very enthusiastic religious notions; but more have recourse to the stimulus of strong cordials to allay the uneasy and nervous sensations peculiar to this time of life, and thus produce a degree of excitation equally dangerous to the equanimity of the moral feelings and mental faculties.

2. *Hæmorrhoidal Discharge.*

Suppression of the discharge of blood from the hæmorrhoidal vessels is almost as detrimental to men as that of the menses is to women. At least, so says Esquirol : and he adds, that its action, exercised in a more advanced age, produces most frequently melancholy and demency.*

From the age of Hippocrates to the present, physicians have attached much importance in the cure of all cephalic affections, and of melancholia particularly, to hæmorrhagic discharges from hæmorrhoids or piles.

I can easily conceive, that in a constitution subject to periodical discharges of blood from the hæmorrhoidal vessels, to suppress such discharge might sensibly affect the brain and disturb its functions ; but as I have never had any direct proof of insanity being induced from this cause, though I have from suppression of the menses, I cannot coincide in Esquirol's dictum.

It is a practice almost universal among the continental physicians to apply leeches repeatedly round the anus to the hæmorrhoidal vessels as derivants, and as a substitute for this discharge. The practice may be of some benefit in cases of insanity clearly sympathetic from morbid actions seated in the abdominal viscera, but I doubt its efficacy in most cases ; for, according to the evidence from anatomical investigations, diseases of the abdominal organs among the insane are by no means common.†

The opinion, that a discharge of blood from piles often proves critical and removes insanity, I have never seen confirmed. From the frequent reference to this disease by foreign writers, we may imagine that it is much more common abroad than in this country ; and if so, a wider

* Dict. des Scien. Médic. tom. xvi. p. 192.

† Compte Rendu, 1826 ; Tableau, No. 15.

field of experience may have offered examples of the cure of mental affections by a natural or artificial discharge of blood from the hæmorrhoidal vessels, which does not present itself to British practitioners.

3. *Varicose Discharge.*

Equally beneficial consequences have been alleged to succeed, both in mania and melancholia, from discharges of blood from a rupture of varicose veins in the lower extremities.

I have neither found the maniacal nor melancholic peculiarly liable to varices; but I see no reason why an evacuation of blood from them might not sometimes prove beneficial. But I suspect such expectation is founded more on the reasonings of the humoral pathologists than upon practical inductions. In the properties of the blood itself, mania or melancholia was sought; therefore, from a hæmorrhoidal vessel, or “a cracked vein swelled with melancholy,” the dark humour which constituted the malady was supposed to empty itself, leaving the pure blood alone to circulate.

Little dependence must be placed upon discharges of blood, whether spontaneous or artificial, from the hæmorrhoidal or from varicose vessels, proving critical. The piles is a diseased condition of the coat of the intestinal tube, and is often a source of great irritation to the patient; and varices, a disease of the veins;—from both a hæmorrhage often issues, which may deplete too copiously a habit already cachectic from age or infirmity; therefore, either may contribute to that very morbid action in the cerebral functions which it was solicited to relieve.

4. *Nasal and other Hæmorrhages.*

The vessels about the head in insane persons being generally much distended from determination of blood,

various cephalic pains and uneasinesses are felt. A fulness and stuffing about the root of the nose is an ordinary and precursory symptom of a paroxysm of mania. Sometimes the sublingual vessels, in cases of insanity, have become so injected as greatly to enlarge the tongue, and prove very inconvenient.

A copious hæmorrhage from the nose, when such determinations prevail, always relieves, and may prove critical, and remove the disorder of the mental faculties.

The propensity to suicide has often been cured by the hæmorrhage from a self-inflicted wound.

To draw blood from the nasal or sublingual veins was formerly a common practice in all cerebral and mental affections. This is now generally superseded by blood-letting from the jugular vein, by arteriotomy, or by local abstraction of blood by cupping or leeches. Upon the same principle as the taking away of blood by any of these modes, the utility of spontaneous epistaxis, or any other hæmorrhagic discharge, in similar cases can be reconciled.

Hæmorrhagic fluxes, however, are not always proofs of plethora, or even of turgescence of the sanguiferous system. Sometimes they import a deficiency of blood, or an attenuated condition of that fluid, from the effects of which a state of atony and fatuity may follow.

There is less danger generally in encouraging all habitual discharges of blood; for they may have become necessary. But they must neither be suffered in excess, nor be suddenly suppressed; because, besides inducing various other diseases, there is great hazard of entailing insanity.

Nature must be protected in all her efforts, for she will often, in her own way, restore the balance of health, as if in ridicule of art.

COMMENTARY IX.

DISEASES COMPLICATED WITH INSANITY.

THERE are various diseases with which insanity is commonly complicated, and which also appear to originate in derangement of the balance between the nervous and vascular systems, and thus prove their relationship. The most conspicuous of these affections are, 1, vertigo—2, epilepsy—3, convulsions—4, apoplexy—5, paralysis—6, catalepsy—7, hysteria—8, hydropic effusions. In fact, there is a strict analogy in all comatose and mental affections.

In all these maladies, as a general principle, the marks of increased circulation in the vessels of the encephalon are unequivocal. But the reciprocal, and sometimes the preponderating influence of the nervous power in some of them is also strongly marked.

Similar causes, constitutional or accidental, will produce, either directly or remotely, all of these affections; and each is liable to alternate, or terminate in the other, or with insanity.

1. *Vertigo*.

Vertigo is a disorder of the circulation, and is a very common symptom precursory to, or accompanying insanity. But there are two kinds of vertigo, which, although both originating in disordered circulation, yet proceed from opposite conditions of it, and which it is very essential in a practical point of view to distinguish—the one arising from a too great impulse of blood in the

cerebral vessels, and distinguished by rapid gyration in the head, succeeded sometimes by nausea or vomiting, and frequently by falling senseless ; and the other, which, more correctly speaking, is a swimming, when objects seem as if approximating or receding from us and becoming dark ; and which state proceeds from a defect in the supply or flow of blood, and assimilates more to that state which induces syncope. The latter is a symptom also of that condition of the system called asthenia.

A careful observer will soon detect the one species of vertigo from the other, and avoid the fatal consequences of an error : for vertigo, whether arising from increased or decreased impetus of the blood, if its cause be mistaken, may produce mental derangement, as well as many other diseases.

Though generally a symptom only, yet in some cases vertigo assumes the character of an idiopathic disease.

Chrichton makes vertigo the third species of the genus *Hallucinatio*, and defines it “ an apparent rotatory motion of external objects, and sense of undulation of the ground, with abolished attention and thought.”

But this affection may be induced by any thing impeding the course of the blood to or from the head ; such as the wearing of too tight a neckcloth, from which practice first giddiness in stooping has been felt, then a sense of fainting upon the head being suddenly thrown back. These symptoms often terminate in some clonic affection, or paralytic debility of the whole frame, diminution of mental energy, and, finally, either in apoplexy or mania.

2. *Epilepsy.*

Epilepsy is frequently complicated with, or ends in, mental derangement. It may be complicated with every form of aberration, alienation, or deficiency of intellect. Thus we find it combined with mania, melan-

cholia, demency, and idiotism. The epileptic attack may be preceded by a furious paroxysm, or merely by elevated ideas, by great depression of spirits, or by mental imbecility, forgetfulness, &c. ; or the reverse may obtain, and the sequel of the epileptic fit may exhibit these morbid conditions of the mental functions.

This form of insanity most imperatively demands the regards of science and humanity.

Morbid dissections, especially Esquirol's, uniformly exhibit proofs of increased vascular action and determination to the brain. Persons predisposed to epilepsy have generally peculiarly prominent eyes, resulting from great fulness of the blood-vessels supplying the organs of vision. The same is observed in persons in a high state of mania, and probably from the same cause. This is so marked a diagnostic, that it is designated the epileptic eye. There is, besides, a peculiar glaze over it, very similar to that look accompanying mania, and which distinguishes it from the large convex eye of near-sighted persons—a distinction very necessary to be observed. Epilepsy occurs in persons most subject to headach, vertigo, incubus, and restless dreaming sleep; and its paroxysms are ordinarily preceded by some of these symptoms. It frequently terminates in, or is exchanged for, sanguineous or serous extravasation in the brain, and consequent apoplexy or hemiplegia.

In some cases of epilepsy, the impetus of blood in the head is astonishing. I knew a young gentleman in whom, during the paroxysm, the blood was propelled into the extreme vessels with such force that it exuded through the pores; and the whole surface of the scalp was covered with blood, in the manner we commonly see sweat. His intellects before he died were greatly impaired; and upon his death, which occurred suddenly in one of these dreadful paroxysms, there was discovered a great effusion of blood in the brain.

The paroxysms are produced or excited by the same causes which occasion inflammation, hæmorrhage, mania, paralysis, or apoplexy; as insolation, violent exercise, especially in hot weather, sudden and great variations of atmospheric temperature, imprudent bathing either hot or cold, gluttony, strong liquors, Venus nimia, mental emotions, and all causes exciting strongly the action of the heart.

Notwithstanding the violent commotion of long-continued epileptic convulsions, persons enjoy in the interval apparent exemption from bodily complaint; and so, likewise, between paroxysms of mania. After the fit a lethargic state will continue, with a slow and heavy pulse, and it generally leaves some impression on the mental powers, which for days remain blunted. The recurring attacks are at length attended with an aggravation of all these symptoms; during which the pupil is not contracted, nor is there any marked sign of compression. The result, however, is permanent fatuity, or death, accompanied, perhaps, by a very slight precursory convulsion. But in other cases, the disease is either preceded or succeeded by violent paroxysms of mania.

Persons of eminent genius have been epileptics; but they are all subject to fits of ungovernable passion.

In the mildest form, epilepsy is to be deprecated; for, by repetition, it generally occasions lesions both of the physical and intellectual functions; and if an early death do not supervene, the malady induces insanity (which is rarely cured) demency, or idiocy.

Of all the modifications of mental derangement, there is none so terrible as that complicated with epilepsy. Maniacal epilepsy is usually characterised by the most ferocious, malign, and often murderous paroxysms; and often it is as instantaneous as it is violent. The effects are sometimes directed against themselves, oftener against

others, and not unfrequently to the immolating of all whom they most love when sane.

When paroxysms of mania suddenly attack persons subject to epilepsy, there is a reckless fury exhibited that seems to differ from the characters of true mania. It appears as if the epileptic impulse when not ending in convulsion, acts on the brain in a peculiar mode, and imparts to it that particular action denominated epileptic mania.

The most horrible actions recorded of maniacal fury, have proceeded from this species of insanity.

Those of the epileptic maniacal constitution, are very apt to be prompted to one of these destructive paroxysms by a fanatical impulse, imbibed from perversion of some scriptural passage, imaginary vision, or waking dream.

A very sober, quiet, and industrious tradesman, aged thirty, subject to occasional fits of epilepsy, and who had lately much inclined to religious devotion, was sitting calmly reading his Bible, when a female neighbour came in to ask for a little milk. He looked wildly at her, instantly seized a knife, and attacked her, and then his wife and daughter. His aim appeared to be, to decapitate them, as he commenced with each by cutting on the nape of the neck. Their cries brought assistance, and he was secured before he had inflicted any fatal wound.

I saw him on the following day. His countenance then presented a most hideous and ferocious aspect: the complexion was a dusky red, his eyes starting from their sockets, and he was continually sighing deeply, or extending his jaws as if going to yawn. The pulsation of the temporal and radial arteries was full and laborious. He could make no reply to questions, although he attempted so to do; but he occasionally exclaimed, "Oh dear!" He appeared to be on the very verge of apoplexy. He was depleted freely both by blood-letting and purging; his head was shaved, refrigerating lotions

were applied to it, and a very low diet prescribed. On the third day his intellects were much improved, and he was quiet. He soon quite recovered, but never had the least recollection of the acts he had committed.

About a year before, he had experienced a similar attack; but then shewed only a slight disposition to mischief. Nine years have since elapsed without a recurrence of epilepsy, or disturbance of his mental faculties.

Persons liable to similar attacks, and the public journals attest that they are not unfrequent, often enjoy, as in this instance, long lucid intervals.

Doubtless, these afflicting visitations are generally attended by some premonitory symptom; but sometimes they are so momentary, that mischief is done before it can be prevented. Hence the greater danger of epileptic maniacs associating with the insane, whose aberrations prove perpetual causes of excitation to them. Besides, it has been correctly remarked, that the frequent sight of epileptic paroxysms will produce the like in an ordinary spectator,* and more especially in a maniac.

At first, as in the above case, the mind is affected only in connexion with the approach, access, and decline, of the epileptic convulsion; but in proportion with the frequency of its repetition, the mental faculties are impaired, till at length continuous insanity follows, which ends commonly in permanent fatuity.

The epileptic has been considered an almost hopeless form of insanity. This, however, is an erroneous opinion; for maniacal epilepsy is found to be, under proper treatment, susceptible not only of a great degree of amelioration, but of cure. It is certainly a most formidable and very often obstinate disorder, but is not always absolutely incurable.

* Cullen, Aph. 1292.

An epileptic patient is an object of constant solicitude, and when pecuniary means are circumscribed, is an intolerable burden to his family; for, from the nature of the disease, epileptics are generally deprived of the power of maintaining themselves; therefore, if straitened in circumstances, although their case may admit of relief, yet the power also of obtaining it is denied. Epilepsy, too, has one feature almost unknown in mania; that is, helpless infants and children, as well as adults, are its victims. And when such a distressing case occurs in a family placed above parochial aid, yet only possessing a competency, well may the parent appeal, as a certain man did to our Saviour, "LORD! have mercy on my son, for he is a lunatic, [*epileptic*,] and sore vexed; for oftentimes he falleth into the fire, and oft into the water." But to whom or where is the appeal to be preferred? There is no help for such a case. For neither in this vast and opulent metropolis, nor in any place of the British empire, though so renowned for charitable institutions, and acts of God-like beneficence, does any asylum exist appropriated solely for epileptics, or even having, I believe, a part allotted for their separate accommodation and curative treatment. Surely this is a great defect in the code of British philanthropy.

All the county pauper asylums, some provincial, and most private lunatic establishments, admit epileptic maniacs; but, I repeat, we have none that offer an arrangement peculiar to epilepsy; or that, receiving such cases when the seat of reason is affected, class them according to their several conditions, so as to offer the best means of relief.* In all the English asylums which I have visited, the epileptics were commingled with the

* This defect, I confidently trust, will be removed by a specific classification of maniacal epilepsy in the intended Middlesex County Asylum for Pauper Lunatics.

lunatics, to their mutual torment, and sometimes danger; and, I will aver, to the certain impeding of recovery. It is notorious, that nothing is more alarming to the generality of lunatics than those sudden convulsions to which the epileptic are subject; therefore, those simply maniacal, and those who have fits, by association reciprocally aggravate each other's malady.

In this branch of morals England is decidedly inferior to her continental neighbours. Almost all the public lunatic asylums in Europe receive the epileptic, fatuous, and idiotic; and if their registers be examined, we have evidence of the good effects which result, provided they are under judicious regulations.

The Paris registers report only five cures out of six hundred and eighty-two old and new admissions of epileptic maniacs.*

In the hospital of La Charité, Berlin, the success has been much greater; the recoveries amounting to near a fourth of the epileptics admitted.†

I fear, however, that epileptic mania has been, and still is, a disease shamefully neglected in British asylums. Enough is already known, from the success resulting from greater care being taken of those afflicted with this malady in foreign and in our provincial asylums, to induce still further attempts to ameliorate their condition, if not to recover them.

Recent experience has proved, that we were in the infancy of our knowledge of the treatment of the various forms and complications of insanity; and we now see the happy issue of more enlightened and scientific views. Why should not the same spirit, good feeling, and increased experience, be extended, and the condition of the poor epileptic, whether maniacal or not, be improved?

* *Compte rendu*, 1826, Tab. 3.

† Burrows' *Inquiry*, &c. App. p. 307.

Maniacal epilepsy is, as may be readily imagined, a fatal disease. In the Paris hospitals the mortality is at the rate of one in seven.*

3. *Convulsions.*

Convulsion, which sometimes supervenes on mania, is another disorder of the circulation. In all convulsions there appears a sensible determination of blood to the brain, or an increased impetus in the cerebral vessels. The increase of momentum is often occasioned by irritation of the nervous system, as in cases where exostosis, projecting spicula, or peculiar conformations of the cranium, exist.

Children troubled with convulsions during dentition, are said to incline to insanity at an adult age.

Greding remarked, that few insane people die of general convulsions; yet he admits that the proportion amounts, in maniacs, to ten in one hundred, and in melancholics, to six in twenty-four.† This, surely, is proof enough of general convulsions being very frequent among the class of patients which this physician attended. Indeed, I can scarcely give credit to the statement; for, though sometimes occurring, such a proportion of this disorder among the insane is unknown in this country.

This author also refers to an exciting cause of convulsions in maniacal epilepsy, and which, though irremediable, has been less regarded, in my opinion, than it deserves; that is, the exceedingly sharp and irregular shape which the processes at the base of the skull often

* When I visited La Salpêtrière, in October 1817, I found about 200 epileptic females sitting in one capacious apartment, heated by stoves to a most oppressive degree, and no proper ventilation. The congregation of so many persons, and especially epileptics, in such a place, must have proved exceedingly injurious to their health, and probably induced many apoplectic or sudden deaths.

† Chrichton, App. vol. ii. p. 363.

present; and which, if they do not lacerate, at least may produce violent irritation of the brain, especially when, either from position or muscular exertion, a larger quantity of blood is suddenly propelled into the vessels at the base of that organ. These deviations from the ordinary formation of the bony bed of the brain, have been chiefly noticed near the *sella turcica* behind the *processus clinoidei*.

In an hundred maniacs, the skulls of thirty-four presented a sharp pointed elongation of the posterior clinoid processes; in others there were irregularities of these bony processes. In twenty-six epileptic maniacs, there were eight in whom this process was singularly sharp and pointed.

Of course, there is no means of ascertaining, in any cerebral affection, whether such organic deviation exists; and even if that were possible, human skill could avail nothing.

I have lost four out of five insane patients from convulsions. I examined four of their heads; and in all of them these processes were so excessively sharp, that they attracted the particular attention of the gentlemen who performed the dissections, who were anatomical demonstrators, and of course intimate with the natural structure of the human body.

In two cases of mania succeeded by convulsions, the evident cause proved to be a spiculum projecting from the inner table of the skull. One of these cases merits peculiar notice.

A gentleman, aged thirty-six, had been for several years the active partner of an extensive mercantile house, and in that capacity had applied extremely close to business, and experienced great fatigue and anxiety consequent upon it. He was a man of admirable talents, possessed an uncommon facility in acquiring languages, and was of great information and fine taste.

From particular circumstances, the business of the house had latterly much declined. This mortified him greatly; and his temper, naturally good, now became irritable; his spirits were unequal, and he was discontented with every thing. He withdrew from business on the conclusion of the late peace, and occupied himself a year in visiting the continent. His conduct was perfectly correct during this tour; but when he returned, an alteration in his moral character was conspicuous, and his health appeared to be suffering. He complained of severe headaches, and derangement of the digestive functions. Indeed, from being very moderate in his appetite, he now put no restraint on the quantity or quality of his food. He could apply to nothing, but occupied himself in trifles.

He was a German by birth; and with the hope of relieving his mind and improving his health, he now visited his native country and relations. This afforded no relief; and he there did some acts that indicated mental derangement. He returned to England and consulted medical advice. The liver was pronounced to be in fault; he was treated accordingly, and in the autumn was sent to Cheltenham.

Having ordered his horses to meet him on the road, he rode to the appointed place, in a very hot day, outside of a stage coach. He got wet through by rain, and in this state mounted his horse, and rode very fast as far as he intended that evening. During the night he was attacked by a violent paroxysm of mania. He was bled largely, and took some medicine. Nevertheless, he rode on horseback next day to Cheltenham. There again, for he took no care of himself, he experienced another maniacal paroxysm, which lasted a few days, and gave way to medical treatment. He stayed there some weeks. On his return, his memory was found to be very defective; he was emaciated and more irascible. Sometimes he was

incoherent; and in the act of speaking, his speech failed him; and, by degrees, his sentient and muscular powers equally declined.

At length insanity was so completely developed, that I was consulted.

January 27th. — I found him as described. He began to relate in a clear manner his feelings, and what had been done for him; but presently he was bewildered, and was at a loss for words. After several ineffectual attempts to explain in English, he intermingled some German words, and at length spoke German only. I reminded him that I did not understand him. He then resumed his narrative in English, but he could not pursue it. He complained chiefly of pain in his head, singing in his ears, and loss of memory.

On the upper part of the *os frontis*, near the coronal suture, a protuberance of an oval form, and rising about a quarter of an inch above the surface, was visible. I was informed, that when an infant he fell from the nurse's arms, and pitched on his head, and a permanent swelling remained; but that he had never experienced any inconvenience from it, nor did he now refer the pain he felt particularly to this spot.

I ordered him to be cupped on the occiput, and to take some opening medicine. He thought the pain and confusion in his head relieved by the loss of twelve ounces of blood.

28th. — He was more incoherent, and appeared for a short time as if under a slight paralytic affection, which was succeeded by some degree of violence. During the following week the pain in the head recurred with greater violence, and then convulsive twitchings of the muscles of the face, and much mental confusion.

Abstracting blood from the head by cupping or leeches, purging, and the application of an evaporating lotion, always relieved him.

February 8th. — In the night he had a strong convulsion, which lasted an hour ; and which went off without any remedy being applied. He daily grew more violent and unmanageable ; and on the 18th was removed into my establishment.

Here, under the influence of a regular system of diet, exercise, and medicine, he greatly improved in general health, and in his mental faculties, except that of memory, which exhibited some very curious anomalies.

Early in June, when the weather was very hot, he was much affected by it ; but he kept very quiet. He now complained of much pain beneath the protuberance on his head, and expressed a wish for a knife that he might cut it off.

June 10th was an excessively hot day, but he felt better than for several preceding days ; and in the cool of the evening he sauntered for half an hour in the garden with a book in his hand, as was his custom, though he had lost the knowledge of reading. Soon after he came in, he was seized with a violent convulsion. His face was excessively red, the carotid and temporal arteries were throbbing with great violence, and the breathing was stertorous.

The temporal artery was attempted to be opened ; but it was not successfully executed, and little blood followed. Cupping-glasses were applied to the head, and he was bled in the arm, and the blood suffered to flow till the arterial action was lessened. Forty ounces of blood were abstracted before any effect was produced : the beating of the arteries was then reduced, the breathing became freer, and the convulsive twitchings subsided ; he swallowed what was offered, and soon after was sensible of what was said to him.

11th. — At 4 P.M. the convulsions returned, but with less violence. I removed the bandage from his arm, and took away about ten ounces more of blood ; and various

remedies were administered. In the afternoon he spoke, and distinguished all about him.

12th.—He relapsed into insensibility, there was a universal tremulous motion of his limbs, alternating with slight convulsions.

13th.—The violence of the convulsions increased, and he gradually sank and died.

Dissection, six hours post Mortem.—On the external surface of the cranium there was a considerable protuberance, extending about two inches in length and one and a half in breadth, on the left side of the coronal suture, close to the central line. The skull was rather thin. On the inner table of the cranium, which formed the cavity of the protuberance mentioned on the exterior, there were several small spots, as if the bone were absorbed, and there it was diaphanous. The portion of the dura mater corresponding to this cavity was converted into an ossific substance, in the form of several irregular spicula projecting towards the brain, one of which, with a very sharp point, was much more elongated than the others. Opposite these spicula the substance of the brain was absorbed, and a cavity formed in it, more than half an inch broad, lined with a tunic-like, vascular, cellular membrane. The tunica arachnoidea had in most parts become consolidated with the pia mater, forming an opaque covering on the brain of a gelatinous consistency: all the vessels were much distended with blood. The substance of the brain was soft and flabby; on dividing the white portion it was thickly sprinkled with bloody points. Between the membranes, and in the ventricles, there was a large collection of water. The plexus choroides were shrunk and pale, as if macerated.

The abdominal viscera were all healthy, especially the liver, the soundness of which had been much suspected during life.

The result of this morbid examination proved that the case had long been beyond the skill of medicine. But a question arises, whether there had not been a time when the application of the trephine on the injured part of the skull, and the removal of the bone, might not have prevented the subsequent consequences. The years which had passed without complaint of pain or uneasiness in the head, and the talent and uniform correct conduct of this gentleman, till within three or four years of his death, lulled all apprehension of mischief from an accident so long gone by. But if the trephine had been applied upon the elevated part of the skull, and a portion of the bone removed before the dura mater became diseased, and converted into an ossific substance with projecting spicula, which, by their increasing growth, at last became the sources of irritation to the brain, — judging from analogy, I see no reason why all the consecutive symptoms might not have been prevented, and his life prolonged.

4. *Apoplexy.*

There is no appellation in the whole nomenclature of diseases which has led to more confusion in medicine than the word apoplexy, which, referring to its derivative, *αποπλῆσσω*, *percutio*, means simply a final effect, *i. e.* a sudden stroke, and not a disease.

No malady is so intimately connected with mental derangement as this affection; but its affinity is recognised in the two-fold light of cause and effect.

Esquirol computes, that apoplexy constitutes a sixth of the physical causes of insanity, and an eighth of the deaths. But in this country the proportion is comparatively small of those in whom mental derangement originates apoplexy. However, a great number of insane persons are cut off suddenly, and these are vulgarly said to die of this malady.

Numerically, perhaps, more cases of insanity complicated with paralysis will be found, because the latter does not, like apoplexy, suddenly destroy life; but paralysis itself has its origin generally in the latter affection, and is in reality an extension of the apoplectic attack.

That any specific disease should be both the cause and effect of another disease, as is imputed to apoplexy in relation to insanity, appears paradoxical. I conclude, however, that in this instance, as in many others, error has arisen from the misapplication of a word which has an equivocal meaning.

Authors describe various species of apoplexy, originating in different causes; but we rarely hear of any other than the sanguineous and serous. The conditions of the brain, however, whence these two distinctions are derived, in reference to the apoplexy which is complicated with insanity, do not apply to the actual state of that organ in most cases of sudden death among maniacs.

In fact, the apoplexy which originates insanity, and that which terminates the life of the insane, is distinctly and essentially different.

Sanguineous apoplexy is the species commonly originating insanity: and those in whom the sanguineous apoplectic diathesis prevails, may be considered as almost equally possessing the maniacal diathesis: it is difficult to pronounce which attack is most threatened.

A great change, both in the moral and mental character, is often perceived preceding an apoplectic, as well as a maniacal paroxysm; and if one do not occur, the other may. Hence, the affinity of sanguineous apoplexy and mania is evident.

Sanguineous apoplexy, too, may happen in concurrence with insanity; but then it is almost always during the incipient or active stage of the latter. So rarely is the former the cause of death in lunatics, that even

in those of the apoplectic diathesis, Georget says, he never met in dissecting but two fatal instances in La Salpêtrière; and even in these there was no effusion of blood into the brain; but an excessive engorgement of the meningeal sinus, and of the external and internal veins of the head, was apparent.

I have, however, seen two cases where effusion of blood into the brain was detected; but the death in each occurred in the early period of the maniacal attacks. Indeed, such an attack is only to be expected on the first access of insanity, and when the system is not yet weakened by debilitating causes. When insanity has assumed the chronic form, the vascular system has scarcely power for the production of sanguineous apoplexy.

The above author describes an affection to which lunatics are liable, and which, though similar to sanguineous apoplexy in several of the outward signs, differs materially from it. In this singular affection a furious patient suddenly loses his recollection, which is succeeded by strong and continued convulsions, and he lives only a few hours. On dissection, a marked sanguineous injection of the cerebral substance is perceived, the colour of which is not like blood, but that of wine lees; sometimes the brain has a perfectly healthy appearance. As death so soon succeeds this attack, it has often been mistaken for sanguineous apoplexy.

Serous apoplexy is also, I apprehend, a frequent condition of the insane. At least, many die suddenly whose bodies, on examination, exhibit no cause for it, nor any morbid appearance, except large effusions of serum into the cavities and between the membranes of the brain.

Such effusions are generally considered as the evidence of increased vascular action of the cerebral vessels, and therefore as emanations from a disorder of the circulation.

There is a peculiar and fatal disease often attacking old lunatics, which has been also confounded with sanguineous effusion, and in which the sudden termination of life seems the only character, etymologically, of apoplexy.

Pinel first mentioned it; and Esquirol says, that suddenly the fury is most violent, then ceases, and in an instant the patient dies. Two short cases aptly illustrate it. A lunatic, aged sixty-two, dry and meagre, was for three months in an extreme agitation and continual delirium. Upon awaking from his sleep he calmly asked his servant for his snuff-box, took a pinch, and died. Another, aged forty-three, of the same temperament, was for a month in a delirious fury. On the thirty-first day he looked pale, begged to sit down, and expired.

It appears in these cases as if all the vital powers were exhausted by the excess of the maniacal excitation; for the interior of the cranium presents no alteration, and the body is always singularly disposed to putrefaction.

From the uniform absence of all indications of vascular excitement in the brain, and from its occurring only in old cases and cachectic habits, it may fairly be supposed, that in these cases the access of furious delirium is the result of the nervous power completely acquiring the ascendancy over the vascular power; and that this proceeds from a deficiency in the supply and determination of blood to the brain, which Boerhaave, Van-Sweiten, Vogel, and others, pronounce to be one of the causes of apoplexy. This condition of the circulation in the brain would justify the designation given by Boerhaave of *apoplexia defectiva*.

This conclusion is further confirmed by the well-known circumstance, that constitutions rendered cachectic by agues, excessive evacuations, depletions, and depressing passions, or want of nutriment, are as much exposed to apoplexy as to mania, fatuity, and idiocy.

The apoplectic termination of mania has been ascribed to a total exhaustion of the irritable and contractile power of the system, such as is experienced in asphyxia from the effect of the electric fluid; but this theory is founded upon the doctrine of the circulation of a fine invisible fluid through the nervous apparatus, and therefore is untenable.

Hence we may infer, that *apoplexia sanguinea* is a source of insanity—*apoplexia serosa*, and *apoplexia defectiva*, the consequences.

These distinct species of apoplexy being acknowledged, will reconcile the apparent paradox of this disease both originating and terminating so very large a proportion of cases of mental derangement.

Dr. Abercrombie conceives, that where persons are attacked by apoplexy, and lie some time in a state of perfect coma, and no morbid appearances are found on dissection of the brain, that the cause is to be sought for in an interruption of the due relations betwixt the arterial and venous systems of that organ, as well as sometimes in the peculiarities of the structure of the head.* He has found in his dissections that these relations of the circulation are often at variance. The operations of the mind, as well as of the nervous and muscular powers, may be equally affected when the adjustment between these two systems is disturbed, as when that of the nervous and vascular systems is so.

Comatose affections of every kind may equally terminate in apoplexy, paralysis, or mania; and on the former may supervene demency complicated with paralysis, as paralysis derived from the brain often originates demency.

The best efforts sometimes are unsuccessful in preventing such effects. The learned Dr. Cooke mentions

* Path. and Pract. Researches on Diseases of the Brain and Spinal Chord, p. 301.

the case of a young lady subject to a soporose affection, during which she would sleep very profoundly. She once slept sixty-three hours. No remedy could avert these soporous fits except mercury, which having produced a severe salivation, she was, while it lasted, free from her complaint a month. Ultimately she became deranged.*

An author has observed, indeed, that in tracing delirium to its ultimate result, from whatever stimulus it proceeds, the final extreme condition is a state of coma or apoplexy.

If the attacks of apoplexy are slight and often renewed, the mind is very prone to extreme irritation and aberration; when stronger, and a partial recovery takes place, insanity is sometimes temporarily, sometimes permanently, developed. Opposition to the apoplectic is a frequent cause of changing absolute childishness into temporary insanity.

Many who have suffered from apoplexy and palsy have previously experienced great irregularities of the pulse; the same is observed in persons predisposed to insanity. Mental emotions strongly excited, interruption or cessation of habitual discharges, suppressed cutaneous eruptions, intemperance, intense study, want of exercise, sympathetic affections with diseased thoracic or abdominal viscera, or changes or accidents inducing cerebral disorganisation, occasion apoplexy or mania.

Great political convulsions, and events producing public alarm, are common causes of both disorders.

In March 1815, when events occurred in Paris greatly agitating the public feeling, it is recorded that disorders of the sanguiferous system were very rife, and that apoplexy was exceedingly prevalent. Du Buisson reports, that at the same epoch he received an extraor-

* Treatise on Apoplexy, p. 373.

dinary number of insane persons, of both sexes, into his asylum in Paris.*

The morbid appearances in the brains of the apoplectic and maniacal, except effusion of blood, are so similar, that if not acquainted with the previous malady, no one could pronounce, on comparing them, which had existed. The attack of either may be equally sudden, and so may be their terminations. Often, no lesion or organic change is discoverable in the brains of the apoplectic or maniacal. Because no trace of it can be detected, we should not doubt that a morbid action has been going on in the seat of the sentient and intelligent principles; in the one case producing a lesion of sensation, volition, and the vital powers; in the other, a lesion, perhaps, of sensation and volition, but especially of the intellectual powers.

The similarity of the result in the dissections of those who have died of lethargy, cataphora, carus, and even of many acute cerebral affections, attended with the suspension or derangement of the intellectual faculties, or of mere delirium, are striking proofs of the common origin of all cephalic affections.

There are abundant other proofs of the affinity of apoplexy and insanity. Thus, apoplexy may originate, alternate with, or terminate in insanity, or *vice versâ*. Similar causes will produce either; and those causes may be idiopathic, sympathetic, or mechanic. Both diseases may continue for a time only, or may end suddenly and fatally. The brain, or thoracic or abdominal viscera, in either, shall exhibit corresponding morbid appearances, or none whatever shall be detected to which the disease or consequent death can be assigned. Neither the one nor the other diathesis is necessarily accompanied by fever, and sometimes no external sign of increased arterial action

* Journal de Médecine, tom. xxxii. p. 343.

is observable. Finally, the plethoric and the leucophlegmatic, the florid and the pallid, the fat and the lean, the strong and the weak, are all liable to either malady, in some one of their respective forms.

Dr. J. Cheyne advances an opinion,* that without the diathesis there cannot be a genuine attack of apoplexy. Some entertain the same opinion in regard to insanity. Both these postulates, however, may be denied. The apoplectic and maniacal diatheses are undoubtedly hereditary; but either disease may be elicited without connate predisposition; and I am confident I have met with cases both of one and the other in persons where neither from descent, form, nor feature, such disorders could be prognosticated.

The varieties of apoplexy to be found in connexion with mental derangement, and the notice I have taken of them, may lead to closer examination of this very important point in the pathology of insanity, and establish a clearer diagnosis, whereby that confusion which now prevails may be prevented.

It must be obvious that such opposite states of diseased action demand very opposite treatment. Consequently, whenever the precursory symptoms lead us to expect an attack of apoplexy, we must reflect upon the species which is threatened, and the stage of the maniacal disorder, whether incipient, active, or chronic, before we decide and prescribe. We may be assured, if apoplexy attack in the incipient stage, or at the acmé of mania, that it proceeds from a very different cause than when it comes on in the chronic stage: the event in one case may be paralysis, and sudden or gradual abolition of the mental faculties; in the other, death usually follows.

Apoplexy every where forms a large proportion of

* On Apoplexy, &c. p. 166.

mortality among the insane; but if the trouble of discriminating be taken, the majority of deaths so reported in public asylums, where old cases and the fatuous are retained, will be traced to that species which, for want of a more appropriate designation, I have called *apoplexia defectiva*.

It has been observed by Dr. Haslam, that in Old Bethlem, more maniacs died of apoplexy and hemiplegia than from any other disease.* But, as I have remarked on various other occasions, that comparatively with any other public hospital for lunatics, no inference can be deduced from the results of Bethlem or St. Luke's hospitals. Sanguineous apoplexy and hemiplegia may have been very frequent among the curable class of patients, whose cases were generally of recent standing; and mere sudden death or *apoplexia defectiva*, have been most common among the old, and *incurable* class.

5. *Paralysis.*

Insanity, according to every authority, seems more complicated with this affection than with any other in the long catalogue of diseases to which it bears relationship.

The brain, Georget says, at first almost exclusively affected as the intellectual agent, finishes by being attacked as the nervous agent; whence the frequency of paralysis among the insane.

This author and Esquirol insist, that more than half the insane in the French hospitals die paralytic; but they describe the paralysis as being the effect, not the cause of insanity. But as paralysis frequently originates in sanguineous apoplexy, and very often precedes the mental affection, it is decidedly a frequent cause, as well as an effect of insanity.

In adopting the term paralysis, as it occurs in

* Observ. &c. p. 259.

connexion with insanity, perhaps we are not sufficiently precise. Paralysis, like apoplexia, comprises very different states of disease. One form of it, hemiplegia, is derived from a disease or lesion of the brain itself; but paralysis may originate only in the spinal chord, or nerves furnished to particular muscles, and affect the motion of a limb or part, and therefore cannot be supposed to stand in equal relation to the mental faculties. If the offices of the nerves arising from the brain, and those from the spinal chord, be so distinct, then it is the first set only which originates insanity, though either form of palsy may be the consequence.

Georget describes two kinds of *paralysis*, *acute* and *chronic-muscular*, as common to insane people. *Acute paralysis* more particularly happens in a state of fatuity, or among those who have been long insane and are deemed incurable. It is not peculiar to the apoplectic, or any constitution or make.

Some days before the attack, the patient becomes more animated, without the colour being heightened, which is almost always pale; the speech is a little embarrassed, or he is more silent and in a stupor; sometimes these precursory symptoms are not perceived; at length he suddenly loses his recollection and is quite insensible, and is deprived of his locomotive powers. The pulse is frequent and strong, especially of the cerebral arteries. There are no other symptoms of congestion about the head; no flush of the face, the conjunctiva is natural, and the respiration is easy. This state continues sometimes a few hours, sometimes days. The patients rarely succumb on the first access of this disorder; demency only is established, if it do not already exist. Perhaps there is left, also, a slight muscular palsy in some part. Almost every succeeding attack is with shorter intervals. Finally, death terminates the disease.

What condition of the brain produces this affection is

unknown; for nothing positive has been discovered from *post-mortem* examinations: there is neither afflux nor effusion of blood in the brain. The softening of this organ, which is frequently found in chronic palsy, is not observed in this case.

Chronic-muscular paralysis is much more frequent, and also less promptly fatal, than the *acute*. It often shews itself at the same time with the development of insanity in persons from 45 to 55, or 60 years of age, and it denotes incurability. It more often comes on in the second or third year, or later. It is usually slow in its progress, and at first partial, and becomes at length universal and fixed. As it proceeds, there is a gradual diminution, and finally total loss of understanding. Georget divides this affection into three stages. The first stage, he says, commences in the muscles of the tongue, to which sometimes it is a long while confined before it extends to other parts. By and by, there is a difficulty in pronouncing words; they are spoken slowly and with stammering, and occasionally the patient is at a loss for words to express an idea, and substitutes one for another; the tongue protrudes a little, or lolls from one side to the other. If the patient can express his sensations, he complains on one, or perhaps on both sides, of a numbness in his limbs, and a feeling of pricking and formication in the extremities, and along the passing nerves; pains of the head, more or less general or circumscribed, most commonly on the side opposite to the paralysis, sometimes on the same side, and the movements become less easy and slower; finally, the power of using the limbs on one side is lost. All the other functions are regular: the digestion especially is good, and the embonpoint is not lessened. In this state the patient may continue a very long time, even years, without the general health appearing to suffer. The other characters or cause of the symptoms do not differ materially from ordinary cases of paralysis, where,

although the mental faculties are more or less enfeebled, yet the patient cannot be deemed insane. This author also observes, that “the chronic paralysis of the first stage, especially if it develop itself at first on one side only, depends almost always on a softening of the substance of the brain; and when it is general from the commencement, the origin is more particularly in the spinal chord.” The paralysis of idiots is almost always a state of complete hemiplegia, with which it commences, and coincides ordinarily with the atrophy of the hemisphere of the opposite side.*

His remarks correspond with general experience, that the paralysis of insane persons is incurable; and I may add, that insanity, whether primary or secondary, in relation to hemiplegia, is, I believe, equally so.

In that peculiar species of paralysis which Bayle describes as the uniform concomitant of chronic meningitis, there is a hesitation only of speech, and partial power of locomotion in the lower extremities; but always with visible lesion of the encephalon.

Paralytic affections of all kinds are probably more frequent in asylums appropriated to the reception of poor lunatics. The majority of cases, both of acute and chronic paralysis, which I have seen, have been among insane persons who have been in the public service, and consequently exposed to hardships and privations. Georget's observations are derived from the insane poor females confined in La Salpêtrière. But Messrs. Bayle, Calmeil, &c. also notice in their descriptions of meningitis (p. 80), the extreme frequency of paralytic affections among the superior insane patients in the Royal Asylum of Charenton.

I cannot but remark on the singular discrepancy in

* De la Folie, p. 472.

respect to the prevalence of paralysis complicated with insanity in the French hospitals, compared with English asylums for the insane. Upon the authority of Esquirol, Georget, &c. we find that half the insane who die in the former are paralytic. What proportion die paralytic in the latter, I have not the opportunity of stating, because the annual reports of our asylums do not specifically notice the nature of the disease of which every patient dies; but, from inquiry, I know the number is comparatively trivial. In my own practice the proportion has not been one in twenty.

It would be difficult to prove to what this difference of mortality from paralysis is owing. In Charenton, the insane men have chiefly been in the military service, and, of course, subject to all the sufferings of active warfare; and, therefore, paralytic affections may be considered a natural consequence among the patients in that establishment. But these causes cannot attach to the insane females in La Salpêtrière. If, however, they have not been subjected to the casualties of the patients in Charenton, yet I think a medical eye will perceive abundant causes in the latter establishment for similar affections. Exposure to great vicissitudes of temperature, and to wet and damp particularly, are always predisposing sources of paralysis; and when we consider the advanced age and debility of the old patients in La Salpêtrière, and see how they are exposed to such causes, we may readily account for numerous cases of paralysis and various acute diseases among them. This remark is not inapplicable to the best private as well as to the public establishments for the insane in Paris. I saw patients when I was last in Paris, of the first rank, on a cold rainy day of the month of October, permitted to expose themselves to the weather and rain, in a manner that would have called for and received the severest reprehension, if permitted in

any English establishment. This want of care must have great influence on the bodily health, and induce more cases of paralysis than otherwise would occur; but I doubt if this will account for the great difference in this respect between French and English hospitals.

The pathology of paralysis would teach us to expect what it is found to be,—a disease most intimately complicated with insanity. And when the disorder of the intellectual functions is accompanied by paralysis, the conclusion is, that the brain, the organ of those functions, is organically affected.

Although paralysis be especially a disease of the nervous system, yet, like all other cerebral affections, we may justly ascribe a great influence to the sanguiferous system in producing it; for it is very often the result of sanguineous apoplexy. Where the functions of the brain or external senses suffer, as in hemiplegia, the paralysis which follows is most likely to be always derived from this cause.

Hence it is plain, that paralysis, like apoplexy, may be both a cause and effect of intellectual disturbance; and that its source is to be sought in a derangement of the equilibrium between the nervous and vascular systems.

6. *Catalepsy.*

True catalepsy is a very rare disease. So rare, indeed, that the celebrated CULLEN confesses he never saw a real instance of it; and Dr. COOKE is inclined to believe that many of the cases detailed are very liable to suspicion.* There are certainly very few cases noticed by British writers, and of these I can find but three or four which are cases of perfect catalepsy: the others are

* Treatise on Nervous Diseases, vol. i. p. 378.

imperfect or spurious, or complicated with other affections.*

Parry, indeed, speaks of catalepsy as not of uncommon occurrence in his practice.†

Foreign authors, however, are replete with examples. Above all, Tissot is very copious on the subject, and many of his histories of this malady rest upon authorities which we have no right to doubt.‡

That many are simulated cases there can be no question; and it is equally clear, that others described have been confounded, even by the learned, with apoplexy, paralysis, epilepsy, ecstasis, somnambulism, tetanus, chorea, and various comatose and spasmodic affections. Vogel particularly cautions us against being led into similar errors.§

Nosologists generally agree, that catalepsy belongs to the comata. Sauvages makes seven species of it; the fifth of which he designates *Catalepsis Melancholica*. But the histories by Ballonius and Forestus, to which Sauvages refers as examples of it, certainly do not present the features depicted in the case which I shall presently describe, and which is much more justly entitled to be called *Catalepsis Melancholica*.

Ecstasis is the affection with which catalepsy is most often confounded; but catalepsy admits of many modifications quite distinct from ecstasis.

Aware of the frequency of this error, and the consequent obscurity in the pathology of catalepsy, Tissot has divided it into perfect, imperfect, and compound: the first, where there is an entire loss of the senses; the

* Phil. Trans. vol. xxxix. — Jebb's Select Cases. — Duncan's Med. Comm. vol. x. — Med. Tracts, vol. iii. — Edin. Med. and Surg. Journ. vol. i.

† Elements of Pathology, &c.

‡ Traité des Nerfs, &c.

§ De Cogn. et Cur. de Catalepsi.

second, where the senses are preserved to a certain degree, and the patient takes food, sees objects, remembers what passes during the cataleptic paroxysm, is sensible to odours, walks when led, &c.; and the third, where it is mixed, or alternates, with other maladies quite foreign to it, as insanity, dementia, ecstasis, somnambulism, &c.

Perfect cataleptics are described to possess, when the paroxysm ceases, the full command of all their faculties; but it appears that sometimes, (as in the case, *vide* p.184), when the corporeal powers have been restored, the mental derangement has continued.

Mania, melancholia, and other disorders of the nervous system, are alleged by some authors to be often consequent upon catalepsy. Boerhaave, however, says that it seldom passes into other diseases, though sometimes epilepsy, convulsions, and dementia, follow, and then it usually ends fatally.* But I have met with no example, in any author, of mental derangement preceding catalepsy.

From the infrequency of the disease, the etiology of catalepsy must be very obscure. The original seat is doubtless in the brain and nerves; but morbid anatomy throws little light on the subject. The heads of those who are said to have died cataleptic have been opened; and according to Haller, Boerhaave, Lieutaud, and Tissot, there have been discovered the same morbid appearances, such as turgid blood-vessels, effusions of serum, polypi, concretions, tumours, &c., as have been seen in the crania of persons who have died of other and quite dissimilar diseases. But sometimes dissection has not detected the least alteration in the contents of the crania of such patients. Hence the same momentous

* De Cognos. et Cur. App. 1043.

questions present themselves as in the examination of the brains of those who have died insane. Are these morbid changes the causes or the effects of the disease? If it happens that no morbid appearance be detected, is the cause organic, or is it functional?

That a redundancy of blood in the vessels of the brain is a cause of catalepsy, is an opinion as remote as *Ætius*,* and he inferred so, chiefly from one being cured of it by violent epistaxis. There are other instances on record of cures being effected in the same way, or by the return of periodical or accustomed discharges.

Parry implies, that the cause of catalepsy is the increased momentum of blood in the vessels of the brain; and he adds, that in a violent case of it, accompanied with total insensibility, which came under his care, pressure on both carotids uniformly suspended the symptoms, and restored the patient's senses; while pressure on one carotid only had no perceptible effect. He further infers, that this condition of disease is merely a different modification or degree of that which constitutes convulsions; for in the experiment which he has detailed, a moderate and incomplete pressure on the carotids removed the catalepsy and induced convulsions; while a greater degree of pressure removed the catalepsy and the convulsions also; and he adds, that the converse order of occurrences was equally true.

Respecting the remote causes of catalepsy, they are more manifest, and may equally produce insanity. Every moral affection, when strongly and suddenly excited; intense meditation, especially on religious subjects; the melancholic temperament; violent fevers in persons of a sanguineous habit; suppression of periodical and vicarious discharges; fumes of charcoal; intense cold; indi-

* Lib. vi. cap. 4.

gestible substances, and worms, irritating the *primæ viæ*, &c., are enumerated among them.

The causes originating mania may partake both of a moral and physical character. It is hardly possible to conceive any more likely to produce such an effect in a sensitive and chaste woman than the circumstances occurring in the case I shall detail. The melancholia supervened in the manner common to mania. The super-vention of catalepsy was an anomaly on which I forbear to speculate.

In the symptomatology of catalepsy, Rondeletius* notes a feature which is highly important: he says, that when every other muscle is still, a slight motion may be discovered in the intercostal and abdominal muscles; a circumstance natural, since those muscles being accessory to respiration—a function always going on, even when every other may be suspended—they are the least under the dominion of volition. A confirmatory remark in a case of partial catalepsy, is made by M. Proust,† who observes, that the intercostal muscles here seem to hold an intermediate station between the systems of animal and organic life.

In those trance-like cases, where the existence of life itself is said to be problematical, as well as in simulated cases, this observation may prove useful in distinguishing truth from imposture.

In regard to the prognosis of catalepsy, authors differ. When it is perfect unmixed catalepsy, it is, some say, not dangerous; but when it is a symptom in acute fever, according to Boerhaave, the prognostic is unfavourable. Compound catalepsy, that is, when it alternates with, or terminates in, epilepsy, convulsion, or insanity, if not fatal, degenerates into atrophy. Burserius says he has

* Method. Cur. † Journ. Gén. de Méd. tome lxi. p. 145.

never seen danger attend it in any form, except when the symptoms were very severe, attended with difficult or interrupted respiration, strabismus, retention of fæces, and loss of strength; yet he refers to others who cite examples of its having ended fatally, especially in apoplexy.*

Females are said to be more subject to catalepsy than males; an assertion easy of credit, since there exists a greater degree of nervous susceptibility in the one sex than the other, and the former are likewise exposed to physical causes which the latter are not.

I have never read any case where the moral causes are so clearly traced to their source as in the following. They have usually been rather surmised than proved. It must be admitted, that they alone were quite adequate, in a virtuous and delicate female, to the production of those physical and mental disorders which followed. I have, therefore, been the more particular in the previous history of the patient.

Mrs. —,† aged twenty-two, was of a fair complexion, with gray eyes, light hair, and a good constitution; and there existed no hereditary predisposition to insanity.

She was a remarkably fine young woman, and had been lady's maid in a family of rank, was herself of respectable connexions, and had received an education superior to her station.

She had before lived as housekeeper with a respectable tradesman, a widower, who, having conceived a

* Instit. Med. de Catalepsi.

† This case, but more detailed, and the observations on catalepsy which accompany it, were read at a meeting of the Medico-Chirurgical Society, December 1825. I mention the circumstance, lest the paper may be remembered, and a charge of plagiarism otherwise attach to me.

passion for her person, made proposals of a nature not to be accepted by a virtuous woman, and she therefore quitted his service. He was otherwise not disagreeable to her.

Another suitor succeeding, her former master hearing of it, came suddenly to London, and made her an offer of marriage; but as his affairs required his immediate return home, he insisted that the ceremony should take place the next day, or not at all. She hesitatingly consented to this abrupt proposal; but the conflicting emotions of her mind prematurely brought on the catamenia.

Reluctance to disclose a circumstance of so much delicacy as an excuse for delay, and the fear of losing a match so advantageous, violently agitated her feelings; and in this condition, both of body and mind, she was married.

The new-married couple set off in the evening, to travel in a stage-coach to the place where they were to sleep. During the journey her passions were highly excited, and subsequent intercourse was attended with much pain. After having slept about an hour, she suddenly awoke in a violent alarm, saying, she had had a frightful dream, and then complained of a dreadful pain in her head. Presently she jumped out of bed and flew to the window, which her husband fortunately prevented her from opening; she then for a short time was unconscious of all around her, and fainted. On recovery, she became delirious and furious. The catamenia ceased from this time.

Medical assistance was immediately procured, and I was informed by the practitioner called in, that finding her in the highest state of excitation, he bled and purged her copiously, and that she was afterwards blistered, used the warm bath, and pursued a strict anti-

phlogistic regimen; leeches also were once applied to the temples.

In about three weeks the violent symptoms abated, and her mind gradually improved.

At this juncture her husband unexpectedly visited her; and she rode in a carriage and walked out with him, accompanied by her nurse. She behaved very composedly on this occasion, but it was followed by an almost indiscriminate communication with her friends. The effect of this indiscretion was a relapse, and mania again supervened, though in a milder form, and in a short time it changed into melancholia.

She remained at home another fortnight, and was then (Nov. 9th) sent to my establishment.

Her countenance was sullen and pallid; the eyes heavy, turgid, and cast downwards; the tongue foul; bowels inert; the pulse rather full and slow; the surface of the skin, and especially the extremities, below natural heat. She answered few questions, and those only in monosyllables; and she was very averse from moving.

As in all cases of mental derangement of which I have no previous personal knowledge, and when the symptoms do not demand prompt remedies, so in this, I delayed prescribing till I had had time for observation. This is a precaution always to be remembered on the first view of a case of insanity; for the history of such cases is rarely satisfactory.

It was observed, that Mrs. — made frequent pressure with her hands on the top of her head; that the carotid arteries beat with great force, and the radial less so; and that there was a preternatural heat about the sinciput, while the surface of the body and the extremities were comparatively cold.

Her head was shaved; blood was abstracted from the occiput by cupping, refrigerating applications were

applied to the head, and the warm bath was resorted to; the stomach and bowels were fully acted upon, and an immense quantity of viscid phlegm was discharged from the one, and of scybalæ from the other. She continued a fortnight with little variation.

24th. — She had become rather stupid, and quite taciturn.

28th. — More animated, and voluntarily asked several questions, but with an idiotic expression.

30th. — A slight mercurial ptyalism came on, from two grains of calomel she had taken every night. Her bowels were less indolent.

Dec. 2d. — Salivation increased; much more intelligent; feeds herself, and complies with every request.

7th. — Salivation ceased.

8th. — All the former symptoms more intense, and new ones developed: there is a much greater disinclination to move; and when roused, a general rigidity of all the limbs is manifest; the intellectual faculties seem more blunted; singular pallor of the skin; the eyes are fixed, and sensibility to light and sounds is diminished. She answers no questions.

18th. — She preserves the exact posture, whether lying, sitting, or standing, in which she is placed; eats mechanically whatever is put into her mouth; if spoken to sharply, the only notice is a sardonic grin. The skin resembles white wax or marble, and is again colder than natural; feet very cold; pulse feeble; respiration undisturbed and scarcely perceptible; eyes fixed and turned upwards; alvine dejections natural; sleeps well, and when taken up in the morning, is dressed like a helpless infant.

During the next fortnight there was little change in her condition; if any, it was for the worse. It was remarked, that during the existence of the cataleptic

paroxysms, the pulsations of the carotids were very quick, and so strong as to be plainly counted at sight through the integuments of the throat; at the same time the pulse was feeble and slow.

Jan. 1st.—All the symptoms were suddenly aggravated; she became a perfect statue; sensation and volition were quite suspended; the evacuations were involuntary; there was a constant sardonic expression in her features; mouth open, and a large quantity of saliva flowed unrestrained; the eyes were immovable, and embedded in the upper eyelids; every limb retained the position in which it was placed; even the most painful was endured without any apparent suffering, and that for a space impossible to be preserved by any one in health. How long she would have continued in any particular posture, I cannot say. I tried the experiment often, and long enough to ascertain the fact—longer would have been inhuman. She was equally insensible to all external feeling, and resisted without flinching every attempt to rouse her by moderate pinching and pricking. These paroxysms generally continued through the day, varying, however, in intensity. Sometimes locomotion was quite suspended; at other times she stepped out. She now exercised, in fact, only one voluntary animal function, and that was, to swallow whatever was put into her mouth; the power of discriminating, either by taste or smell, she did not possess. The pulse was soft and slow.

My friend, Dr. A. T. Thomson, who was attending in the house, saw Mrs. ——— in this stage of the case.

During this condition she was twice cupped, and once leeches were applied to the head. Tartarised antimony was exhibited, but moderate doses produced no effect on the stomach; she was briskly purged; the spine

was well rubbed with stimulating embrocations; blisters to the extremities, and irritating clysters were prescribed; and the warm bath was continued.

6th. — Little alteration; the head was again shaved, and a blister was applied over the whole scalp, which was thrice renewed in the course of the following week.

7th. — She evinced much more animation; for she spoke, though incoherently, noticed surrounding objects, fed herself, and walked unassisted. The pulse was fuller.

11th. — Improving. She is sensible to the calls of nature.

16th. — Small blisters were applied in succession along the whole course of the vertebral column.

26th. — Limbs much more mobile, but she is rather stupid. The tongue being very foul, an antimonial emetic was given: an ordinary dose now had a due effect. It brought off a great quantity of viscid phlegm, and seemed to emulge and rouse the whole system. Emetics were continued twice a week, and with evident advantage; for all the corporeal functions improved, and there were occasional glimpses of returning reason.

February 3d. — She assisted in several little domestic offices.

4th. — The stupor returned, but not the immobility of limbs.

6th. — Her husband and brother visited her; but she did not recognise them.

She varied till the 12th, when she arose in the morning in possession of every faculty, both corporeal and mental. She voluntarily assisted in domestic affairs, and talked rationally and cheerfully. She had a perfect recollection of being brought into the house, and of most things prior to the attack of catalepsy; but from the accession of that affection all was a blank. Sometimes,

however, during this day a slight stupor came on, from which she roused herself with difficulty.

13th. — I was greatly mortified to find her quite torpid and mute. She was again cupped, and afterwards emetics were more frequently given.

20th. — Not improved. I urged the introduction of a seton near the occiput, which I had before proposed, but to which her husband had objected. But he now intimated his intention of removing her into the country; and on the 26th I lost sight of this interesting case.

Nevertheless, I made diligent inquiries as to the progress and final result of it. I learnt that she resided six months in lodgings, during which the seton I had so strongly recommended was tried. From its effect, she has since informed me, she derived very great benefit. The stupor and confusion of ideas she before experienced left her as soon as the discharge from it was established. She then removed to the sea-side, where she used both the warm and cold sea-bath, and took a great deal of exercise. At length the menses re-appeared, and the flow was as great as occurs in many miscarriages. Up to this event she had experienced slight returns of her cataleptic symptoms.

From this date, however, her cure was complete; and she went to live with her husband. She kept the seton open near a year.

She has since borne several children. More than ten years have passed, and she has never experienced a return of any of the above symptoms.

Many circumstances in this case indicate determination of blood to the brain: the interruption of the menstrual flux, the discordance between the force of the carotid and radial arteries, and the temporary relief always produced by abstracting blood by cupping from the head during the existence of the cataleptic symptoms, support

this inference. I therefore several times tried the effect of Dr. Parry's experiment of pressure on the carotids ; but I was never so fortunate as to arrive at the same results from it.

It has been observed, that catalepsy is a malady most prevalent in the female sex ; and likewise, that it is rarely preceded by mental derangement. I very recently, however, had a young gentleman, a native of Peru, though of Spanish origin, under my care, with symptoms of catalepsy. Here the attack commenced with slight symptoms of mania ; in about a month they changed to those of melancholia ; then, in a fortnight more, degenerated into fatuity, with entire unconsciousness. Frequently, volition and locomotion were quite suspended. Wherever he was placed, there he would remain ; and in whatever position, that he would retain for some time. In this state he was embarked to return to South America.

Throughout the two months he was under my care, there were few symptoms of corporeal derangement. The circulation was little affected, and the functions of the *primæ viæ* were uninterrupted. No regular treatment was attempted in this case, as he remained only till an opportunity offered of sending him to his native country.

Another case in a young man, complicated also with melancholia, has recently come to my knowledge, in which the cure, both of the cataleptic symptoms and mental derangement, was effected in about six weeks by the carbonate of barytes.

7. *Hysteria.*

Hysteria, which alternates with headache, vertigo, and epilepsy, sometimes degenerates into mania. Females only are generally supposed to be subjected to this affection ; but males also are certainly occasionally affected by it.

C. Piso,* T. Willis, Sydenham, Boerhaave, Cullen, and the best authorities, attest this fact—a fact of considerable importance in the diagnosis of this disease.

Here, again, therefore, as in the acceptance and application of the word *apoplexia*, we are misled by the derivation; the radical of hysteria being *ὑστέρα*, the uterus or vulva.

Nervous susceptible women between puberty and thirty years of age, and clearly the single more so than the married, are most frequently visited by hysteria; and such constitutions have always a greater aptitude to strong mental emotions, which, on repetition, will superinduce mental derangement, or perhaps epilepsy.

When, however, men are subject to the hysteric passion, an accession of mania is more to be apprehended than when women are so affected; because the nervous temperament is thereby characterised more strongly than is usual in the male sex, in whom, comparatively with the female sex, it is certainly a very rare disease.

In a disorder so well known, a description of the corporeal symptoms is needless; but many will be recognised as indicative of sanguineous determination to the brain and other parts. All the exciting causes of it are those which are accessory to this effect.

Salivation, which is supposed to be derived from an increased action in the capillary circulation, is a frequent symptom in hysteria. Sydenham remarks, that he has often known salivation attend for a whole week in this disease; and this is also a frequent symptom both in mania and melancholia, and also in hypochondriasis. Either an excessive flow of tears or of urine is a very common symptom and termination of this malady: this is only determination to other parts.

* *Hysterica symptomata omnia ferè viris cum mulieribus communia sunt. — Select. Observ. et Consil.*

Every thing which diminishes the inordinate action of the heart, and relieves the over-distended vessels of the head, removes, and often instantly, the spasm and other symptoms of the disorder.

Thus, a great flow of tears or of urine, discharge of offending ingesta from the stomach, unlacing of stays or bandages which compress too tightly the viscera, artificial or spontaneous hæmorrhages, affusion of cold water, particularly on the head, cold drink, fear, &c., by any of which actions the circulation is equalised, will terminate the affection.

Delirium is a common symptom of hysteria; and this symptom is prolonged sometimes beyond the removal of the spasm or paroxysm. The functions of the brain are probably only sympathetically affected; but as in all other sympathetic affections, if often repeated, the brain at length retains the morbid action, and insanity is developed.

Some go so far as to assert, that hysteria is of that class of maladies which, wherever it is manifested, betrays a maniacal diathesis. Occasional hysteria, however, in young and susceptible females whose nervous systems are always highly irritable, may certainly occur without any such suspicion. But habitual hysteria clearly approximates to insanity. It should, therefore, receive serious attention, and be as speedily as possible removed; more especially if it be complicated, as it often is, with hypochondriasis. And if this affection attack a male, double precaution should be taken lest it be converted into mental derangement.

8. *Hydropic Effusions.*

There is no proof of a morbid action in the brain of insane persons so uniform as effusion of serum within the cavities and membranes.

Such collections of water may be the effect of inflammation of the brain itself, or its envelopes, and yet no appearance of recent inflammation be discovered; for effusion may so entirely relieve the blood-vessels as to leave no signs but of distension. Serum is never found in any part, perhaps, except as a consequence of diseased vascular action, although that action may not have been so violent as to amount to inflammation. On the contrary, watery depositions within the encephalon are frequently the effects of simple increased vascular action, or of obstructed circulation.

With very few exceptions, out of many dissections of the heads of maniacs, I have found serum in the ventricles, or between the membranes of the brain, or in the theca vertebralis.

Effusions of serous fluid into the cavities of the brain have been asserted always to prove fatal;* but this opinion is clearly as erroneous as that which pronounces it to be always a cause of mental derangement. There is little doubt that where there have been considerable accumulations within the cranium, still all the intellectual faculties have continued perfect. Cases are on record which seem to prove that the accumulation of serum within the cranium may influence the mental disorder; for sometimes the symptoms indicative of its presence have so rapidly disappeared, while reason has as quickly been restored, that it has looked almost like the effect of magic. Cases also occur where this morbid condition of the brain inducing insanity happens periodically, as if the exhalants and absorbents were in a constant state of action and re-action, and that there was a perpetual struggle between the morbid disposition of the one set of vessels and the vigour of the other.

* Edin. Med. and Surg. Journ. No. lviii. p. 98.

That collections of water within the encephalon may continue without disturbance of the mental functions, the following case is an example: —

A very old gentleman had for several months been complaining of various sensations in his head, which he could not very well define; but he compared them to the running about of little chickens within his cranium. His pulse was small and irregular, and often fluttering; and sometimes he felt rather faint.

One day, although there was nothing more than usual to indicate danger, yet he declared that he felt his death was near. He took some refreshment as usual, and afterwards commenced writing: suddenly he was faintish, and immediately expired. He had expressed a desire that his body should be examined. There was no morbid appearance but in the head; and there a most extraordinary quantity of fluid was collected. His senses were entire to the last.

It would appear, from a case recorded, that the presence of fluid may operate on the external senses correspondently with its site within the encephalon: a girl about nine years old, with symptoms of water in the brain, whenever she was in an erect position was quite blind; on throwing her head back she felt a motion internally towards the occiput, and while she held it so, her vision was distinct: but the blindness always returned when she sat up. She died shortly, and a very large quantity of fluid was found in the ventricles and other parts of the brain. Besides, we may refer to the numerous instances of chronic hydrocephalus, where the patients often evince great acuteness, and even precocity of intellect.

Not only the symptoms in the living denote the frequent presence of water in the brain, but dissections exhibit appearances of its having been long deposited there. From the pallor and flaccidity of the substance

of this organ, and its membranes, and especially of the plexus choroides, it may be inferred, that they have been for some time undergoing a sort of maceration. The evidence therefore is more than presumptive, that hydrocephalus does exist in adults whose intellectual faculties are quite perfect, as well as in those whose mind is deranged.

But many still insist that water in the brain is always a consequence of the maniacal action, and that such action cannot exist without producing this effect.

The tendency of children to acute hydrocephalus before dentition is completed, when strong determination to the head prevails, strengthens the opinion that it is a disease of excessive excitement; and the best authorities coincide, that the symptoms of excitation do not appear to depend upon the effused fluids,* any more than mental derangement is consequent on effusion. If the cerebral excitation apparent in the first stage of hydrocephalus or mania originated in such a cause, then, upon dissection, accumulations of fluid within the encephalon would always be present. We find, however, that cerebral irritation may be so great as to produce all the symptoms of the first disease, and shall run through all its stages and destroy life, yet the pathognomonic sign whence the disease is named, viz. dropsy of the brain, shall be wanting; and so likewise insanity, however strongly developed, shall offer no trace of effusion.

There is a striking analogy in the commencement and termination, as well as in the morbid dissections of hydrocephalus and mania; although the one is attended with symptoms of an acute, and the other of a chronic affection.

In hydrocephalus the external senses are sometimes morbidly acute, especially to light and sound; to all sur-

* Remarks, &c. by Garnett, Med. and Phys. Journ. vol. v.; Cheyne on Hydrocephalus Acutus, p. 59; Abernethy's Surg. Obs. p. 93.

rounding objects, some are painfully sensible; and the understanding suddenly acquires an aptitude not before observable. In others, the sensibility and the mental faculties seem obtunded. The same observations apply to insanity. What further attests that effusion is not the cause of the delirium in the first disease is, that after fury, convulsions, and insensibility, a little before death the intellects are often completely restored.* The same phenomenon often, as I have before remarked, occurs in insane persons at that awful crisis; and collections of water, apparently of long standing, have been afterwards found in the encephalon.

Like insanity and apoplexy, too, the diathesis of hydrocephalus is hereditary; and where a predisposition in the organisation of the encephalon obtains, there increased impetus and fulness of the vessels of the head, whatever be the stimulating cause, will induce the disease peculiar to it.

Again, as in the heads of children who died with all the attendant symptoms of hydrocephalus, so likewise in those of adults who have died of apoplexy or mania, no sign of any of these affections has been traced. Further, life itself is frequently extinguished, through the medium of a sudden impression upon the brain; in all these diseases, without the evidence which, *à priori*, we are led to expect of the cause of death.

In this and other cerebral affections from accelerated circulation, death sometimes so rapidly follows, that the effusion, which, if the excitation had gone on, would shortly have happened, does not take place. Now, as effusion is a common termination of over-excited vascular action, which, when it commences, abates excitement, it must be considered as a salutary process of nature to relieve a morbid action. It is, therefore, not improbable,

* Cheyne, p. 21.

that insanity may terminate in this way. Provided the quantity of fluid effused into the cavities of the brain be small, I see no reason why it should not, as well as extravasated blood, be entirely absorbed, and a perfect cure be established.

We cannot be surprised that in infancy, when the bones are soft and the sutures imperfectly closed, that the bones of the skull should expand and admit immense hydropic accumulations, without lesion of the understanding. But even where the bones of the skull are firm and do not admit of expansion, as in adults, we find that very large quantities may be collected within the cranium with little deterioration of the intellectual faculties. Since the skull cannot be distended by the accumulation, and the capacity of the cavities in the brain in a state of health being very small, unless some expedient were adopted by nature, it is highly improbable that the functions of the mind under such circumstances would be retained. But in these cases the quantity of blood circulating within the encephalon is, no doubt, diminished nearly or exactly in a ratio with the quantity of water effused; so that the entire contents of the cranium are in fact the same. We see a similar disposition in the brain to accommodate itself even to hard substances, as in the growth of tumours, with little or no disturbance to its functions.

From the frequent occurrence of water within the encephalon of maniacs, it is probable that such collections are intimately connected with that specific condition of the brain which constitutes the maniacal action. If effusion be, as there is reason to imagine, the effect of great vascular excitation or irritation, either arterial or venous, we might suppose that such excitation or irritation would cease when the effusion was completed, since inflammation often terminates in this way.

Nevertheless, the delirium of an inflammatory state, or

that which attends the congestive state, often continues, in a chronic form, when the active condition of the vascular system which precedes effusion ceases. Sometimes, however, both the one and the other of these states end in resolution, and the patient rapidly recovers.

Many conceive that effusion of water is a concomitant and consequence on a peculiar excitation of the vessels of the brain in certain forms of insanity.

The late Dr. S. F. Simmons* mentions a species of hydrocephalus which sometimes takes place in mania, but which had been taken little notice of, he says, by medical writers, in proportion to its importance. Water here is always found within the ventricles, and between the pia mater and the surface of the brain.

Morgagni has observed the same, and so has Bonnetus ; but they attached no importance to the fact.† Simmons describes six of these cases, with their dissections, and the various morbid phenomena which the brains exhibited. He remarks, that similar appearances formed a large proportion of those who died maniacal, and whose heads he examined. In none of the cases did the pia mater shew signs of inflammation ; but it was more or less thickened and opaque. He does not venture to conclude whether this thickening should be considered as a cause or an effect of morbid excitement of the brain. As to the effusion, he conceived that it could not depend on a preternatural hardness of the brain, but was probably often produced during the continuance of mania by hard drinking, since two of the patients were known to be intemperate in liquor ; and in two instances of analogous effusions, quoted by Morgagni, a similar intemperance is mentioned. Simmons adds, that from whatever cause

* Lond. Med. Journ. vol. vi. p. 159.

† De Sed. et Caus. Morb. lib. i. epist. 8.

hydrocephalus in mania proceeds, it is best to lessen the determination to the brain, and to moderate the preternatural excitement of that organ. In this species there was no symptom sufficiently distinct from those of mania, to prognosticate whether effusion had or had not actually occurred.

In cases of *delirium tremens* (an affection originating in drinking ardent spirits,) that have ended fatally, I have, on opening the head, found water and precisely the appearances Simmons describes; and I remember, in one particular case, death occurred very suddenly, without a symptom to lead to the expectation of such an event; and I found an immense accumulation of water in the head. Indeed, in this subject, had he not been, till within two days of his death, a most active man, and taking strong exercise, there was reason to have suspected an hydropic diathesis; for when, a few hours after death, the corpse was lifted from the bed to be opened, the pillow and bolster which had supported the head, and the bed, were found saturated, and even the floor was wet, with the serum which had flowed from the orifices made by a scarificator used in cupping on the occiput just before he died. The arteries of the head were found rather empty, but the veins were turgid.

Few opportunities occur of opening the heads of persons recently insane; but sometimes they die of other diseases within a few weeks of the access of mania, or from accident. I have examined the brain in five such cases, and no water, or a very small quantity, was found in the ventricles of the brain.

From all the evidence, I am led to conclude, that in every case of hydrocephalus among adults, or collection of serum in the heads of those who have died insane, as well as in the hydrocephalus of children, such collection is always in consequence of increased vascular action in the vessels of the brain; and that it may long

exist there without disturbing the intellectual faculties, or producing a mortal effect.

But, on the contrary, from morbid dissections of lunatics who have sunk suddenly, as if in a state of syncope, and died in perhaps half an hour, and no other cause for it except a large accumulation of water in the encephalon, could be detected, I assume that in such case this has proved the cause of death.

In ascites and anasarca, when the consequence of excess in drinking spirits, mental aberration is a frequent concomitant. Here the liver is always diseased, and the mental disturbance is sympathetic with the hepatic derangement, and in no way connected with or dependent on the dropsical effusions. Indeed, the delirium rarely comes on till the disease is very far advanced, and often precedes only by a few days or weeks a fatal termination.

Hydropic effusions into the cellular membrane of the lower extremities are considered favourable, because they sometimes prove critical, and terminate the disorder of the mind.

From this review of the physical phenomena of disordered intellect, apparent in the living and the dead, I deduce,

1. That the circulating system, in every case of insanity, is morbidly, though often differently, affected.

2. That the healthy exercise of the intellectual functions is dependent on a due regularity in the supply and momentum of blood to the brain, the source of the nervous system.

3. That while the vascular and nervous systems act in concert, the harmony of the intellectual functions is undisturbed.

4. That in all cases of insanity, the vascular and nervous systems are in a state of opposition.

5. That in incipient insanity, excitement of the vascular system generally predominates; in chronic insanity, the nervous.

6. That in all the diseases complicated with insanity, there is a well-marked ascendancy of either system.

7. That as the actions of the two systems approximate, improvement in the intellectual functions takes place; and that when they again act in unison, sanity is re-established.

COMMENTARY X.

METASTASIS, SYMPATHY, AND CONVERSION.

THE disorders hitherto treated of are of a fixed and tangible character, and in which there is a visible disturbance both of the mental and corporeal functions. But there are many other disorders where the characters are changeable, and which produce mental derangement, but in an indirect and more mysterious manner. Diseases of remote parts frequently occasion mental derangement by shifting morbid actions to the brain.

There are three modes through which the brain is morbidly affected by remote diseases, and insanity is induced.

1. By *metastasis*, or translation ;
2. By *sympathy* ;
3. By *conversion*.

These three modes of originating mental derangements have hitherto been usually considered as one and the same, under the designation of sympathetic causes, and hence some confusion has arisen ; but in fact, they are distinct morbid actions.

In *metastasis*, the part or texture primarily affected is completely freed when the morbid action originating in that part removes itself to another ; but the morbid action may return again to its original seat, and leave the part secondarily affected free.

In *sympathy*, the functions of an organ or part primarily deranged may remain permanently so, while those of a remote organ or part shall assume all the characters of the morbid action of the primary affection.

In *conversion*, a disease shall leave a part or texture

where it was situated, and another disease in some other part or texture is immediately superinduced.

1. *Metastasis.*

Although every disease by metastasis or translation be a secondary affection, yet it differs widely, as may be seen in their respective definitions, from secondary or sympathetic affections.

Thus, a metastatic affection may quit the organ or part to which it is translated, and return to that primarily attacked, and there run its course: a sympathetic affection is produced from a lesion of structure or function of a remote organ or part, which organ or part is not freed by the secondary morbid action it has raised; but both the primary and secondary morbid actions may proceed together.

Metastasis, therefore, is a simple translation of a morbid action from one part to another: sympathy excites a corresponding morbid action in another part, which may act synchronously or alternately; and this action may persist, while the part primarily organically lesed may recover and be restored to its natural functions.

There is yet another difference between metastasis and sympathy: the one arises from, and when transferred, originates, an acute affection, or what may be termed super-excitation; the other generally originates an affection of a more chronic kind, characteristic of sub-excitation. Both these morbid conditions, however, appear to be disorders of the circulation, inducing local determinations, either in the arterial or venous systems, and are probably propagated by the communications of the nervous ganglia.

Metastasis and conversion may be designated vicarious affections, where one disease is transferred and acts for another. They are different modifications only of one common action, the causes of which may be properly denominated masked; for there is no indication, perhaps,

of the event till it has occurred ; and it often does occur without the possibility of prevention, even if it be suspected. Insanity arising through any of these modes demands peculiar consideration ; for as they are all secondary, and not primary, affections, so will the manner of treatment and the prognosis differ.

The effect of a translated morbid action will be correspondent with the part attacked : hence there is no agreement between the degree of the old and the new excitement. That which produces but a slight impression in one part, when translated to another excites a violent commotion. Many inflammatory diseases are susceptible of translation. Thus gout, which, when confined to the extremities, is a local complaint, occasioning comparatively little constitutional, and rarely any mental disturbance, produces by metastasis to the stomach high inflammatory action, and when to the brain, cephalitis, pyrexia, and furious delirium. The same occurs in acute rheumatism ; but the translation in this case is usually to the heart, and not to the stomach ; but if to the brain, whither I have known it shift, it creates all the symptoms of acute inflammation of that organ.

Now all morbid actions, perhaps, are susceptible of different modifications, and when transferred to the brain, occasion different degrees and forms of delirium. The importance, therefore, of studying them, and distinguishing the phenomena of metastasis, sympathy, and conversion, in relation to mental derangement, is obvious.

The morbid action of organic diseases is often suddenly transferred to the brain, and occasions while it lasts a real delirium, to the complete suspension of the original disease ; and the patient, from the last extremity of existence, becomes suddenly endowed with a degree of muscular power truly amazing. In this condition all the phenomena of insanity are developed. It may be continued for months ; and upon the sudden subsidence

of the delirium, the original disease resumes its course, and the patient dies in a few hours or days. This frequently occurs in pulmonary consumption.

Aretæus notices the propensity in phthisis to induce insanity; and Mead has observed, that there appears an interchangeable relation between lunacy and phthisis pulmonalis; the latter being cured by the accession of the former, and recurring as soon as the brain resumes its natural functions.

In the last stage of consumption, a delirium is apt to come on; and I have several times been called to visit a patient in this state, from an impression in his own opinion that he was insane. But I have invariably found this symptom a certain indication of approaching death.

Not only every viscus, but the mucous membranes likewise, which are so much more liable to stimulation, possess the power, and transfer morbid actions more frequently, perhaps, and with greater facility, than the viscera.

I have remarked, that when the brain is affected by metastasis from a remote diseased organ, the degree of mania or delirium, though perhaps violent, is of a more simple character than when transferred from inflamed membranes.

Numerous diseases have an aptitude to shift to the brain, of which we cannot be too much on our guard. Besides phthisis, asthma, chronic catarrh, gout, rheumatism, and all cutaneous eruptions, are in this way causes of insanity. The sudden suppression of the menses, and of hæmorrhages from the lungs, nose, or hæmorrhoidal vessels; or of habitual discharges from old ulcers, setons, issues, chronic diarrhœa, &c., transfer irritation to the brain. The return of such diseases to their proper seats, the re-appearance of eruption on the skin, or the renewal of the suppressed discharges, are the

natural and ordinary means of restoring sanity of mind in such cases.

The following is a fatal case of the transfer of inflammatory action:—

A young man, rather addicted to the drinking of spirits, was seized with all the usual symptoms of quinsy. He was recovering, when, the first day of his having liberty to go down stairs, he found means to indulge in his propensity for strong liquor. There was reason to believe he took only a small quantity; but he was in a few hours after attacked by fever and furious delirium, and all the symptoms of true cephalitis. The surgeon who attended him resorted to such judicious measures as the great excitement seemed to demand, and with a favourable effect. The family, however, alarmed at the vigour of his practice, suggested a consultation; the result of which was a cessation of proper remedies, and the adoption of such as were suitable to simple mania.

On the following day, the patient being worse, I was called in, under the conviction that it was only a maniacal attack. It was too late: effusion had evidently taken place, coma supervened, and he died in about ten hours.

Insanity may be induced by suppressing recent diarrhoea—of which the following is an example:—

A young healthy man, aged twenty-four, was attacked with rigors and fever the 29th of November, and a smart diarrhoea followed. There was at the time in the house a fatal typhus fever, with which he believed he was infected.

Finding that he did not get better, he set off on the 3d of December from Cheltenham for his native village, near London, travelling all night. Though strongly urged, he had suppressed all evacuation, and had scarcely taken any nourishment during his journey.

He arrived next morning very exhausted, and soon

after had a purging stool. He was observed to talk very fast and wildly. Presently, he was seized with a sudden and furious paroxysm of mania. The violence subsided in about half an hour. Shortly he had a similar attack.

I visited him about three hours after the first paroxysm occurred.

He was quiet; his countenance was haggard; eyes much suffused; tongue quite clean and moist; pulse 120, full, and throbbing; skin hot, but moist; head very hot; abdomen rather tense, and tender upon strong pressure. He talked incessantly and incoherently, though he fancied that he was deprived of speech, and asked for pen, ink, and paper, to answer my questions.

Twenty-four ounces of blood were taken from the arm. While the blood flowed the pulse became softer, and when he had lost twenty ounces it sunk to 100. Doses of calomel, and a purging mixture of infusion of senna and salts, were ordered to be repeated till the bowels acted freely again; he was put into a warm bath, an evaporating lotion applied to his head, and low diet and quiet enjoined.

He went to sleep soon after I left him; his bowels evacuated several dark and very offensive stools; and on the next day I found him calm and free from every hallucination. Pulse 104, and rather tense; tongue furred; skin moist, and some pain across the forehead.

Six leeches were applied to the temples; the bowels further purged; and a saline draught, with digitalis, to be taken every four hours, was prescribed.

December 7th. — Very calm; pulse 104, but lower; tongue more coated, and dark; bowels very relaxed; evening exacerbations of fever, and last night very restless. From this date there was some degree of fever, with gentle diarrhœa, which continued till the 28th, when it wholly ceased, and he perfectly recovered.

Of insanity proceeding from suppressed chronic diarrhœa, I shall quote the following : —

A gentleman, aged seventy, of a very delicate constitution and most temperate habits, had for two or three years, notwithstanding the best medical advice and the most careful conduct, been subject to constant colliquative diarrhœa.

At length he was so reduced as to be given over, and his death was hourly expected. By way of affording him present comfort, a much larger dose of opium than he had ever taken, mixed with a powerful astringent, was given him. It effectually stopped the purging. He took plenty of nutriment, and gradually recovered his strength. But as he grew stronger, a total change in his moral character was observed. I had known him many years. His disposition, before even, meek, and remarkably correct and modest, became turbulent, noisy, extravagant, and obscene; and he laboured under the most extraordinary and ludicrous delusions. He lived seven years in this changed condition. At length his bowels became very lax again, and he gradually wasted from the effects of it. But probably the morbid action of the brain had been so long continued as to produce some organic change, for the character of his delirium was unaltered till his last breath. He died in my presence, humming the tune of an old ballad.

This case presented throughout much of the character of insanity which I have seen in other old people, and which has been designated senile delirium.

In both these cases, the morbid irritation of the bowels was evidently transferred to the brain. In the recent case, as might naturally be expected, the renewal of the alvine discharge removed the mental disorder, though a degree of febrile excitement continued. In the chronic case, had the reproduction of the diarrhœa been attempted, life would have been extinguished with its

return. When, after several years, it spontaneously did return, the morbid action of the brain had been so long continued that it had become a chronic and incurable affection.

2. *Sympathy.*

No physiological fact is better established than that organs remotely situated, such as the lungs, stomach, heart, liver, spleen, uterus, bladder, kidneys, intestines, &c., are frequently morbidly affected by lesions or injuries primarily affecting the brain; and, on the contrary, that the brain may be morbidly affected by a diseased action of remote organs. Nay, it is contended, that the organ primarily affected may remain permanently diseased, while a distant organ shall put on all the effects of the morbid action of the original affection, and yet on dissection be found apparently in a sound state.

In adverting to the causes of insanity, the possibility of such remote and obscure actions should always be borne in mind; for these reciprocal sympathies have a most powerful and extensive influence in originating and transferring morbid actions; and whether the intellectual derangement be primary or secondary, it is of the utmost importance to ascertain.

The origin and affinities of morbid sympathies are the most obscure of nature's operations; and, like the essence of the intelligent principle, still, and for ever probably will, remain enveloped in mystery. Inscrutable, however, as the sources and connexions of these affections may be, still, as insanity is frequently to be traced to the latent influence they exercise on the human system, the doctrine and effects of sympathy claim ampler notice.

Hippocrates was aware of the sympathetic consent of a diseased part with another remotely situated, and considered it as an occult source of many disorders otherwise inexplicable.

Aretæus, whose authority in maniacal complaints is pre-eminent, expressly indicates that their seat is not always in the encephalon. Galen and others considered that the operations of the mind were equally liable with those of the body, through this connexion, to be deranged.

Réga, Whytt, Barthez, Darwin, &c., revived these opinions of the ancients; and have shewn that the influence of sympathy is far more extensive than had been imagined.

When the functions of the brain are primarily strongly disturbed, it must be expected that every organ will be implicated correspondently with its connexion with the brain; and in proportion to the increase and intensity of the essential symptoms of insanity, so necessarily will be the sympathetic affection. Hence, blows on the head immediately affect the stomach or liver. Sometimes, when the brain is greatly excited, the whole alimentary canal sympathises, and its action is reversed, suspended, or impaired.

Morgagni quotes two cases of persons who died apparently of pulmonary diseases, but the brain only exhibited a morbid appearance;* and both he and Bonnetus† relate instances of various abdominal affections, where dissection shewed there was no organic lesion but in the head.

Abscesses of the liver are noticed by many authors as consequent on injuries of the head. In these cases it has been suggested, that at the same time a blow must have been received on the hypochondrium. But Larrey clearly proves, that inflammation and suppuration of the liver really follow where no such suspicion can attach; for soldiers who have received sabre wounds only on the head, which did not fell them, experienced during the

* *Suprà cit. lib. ii. epist. 15, et lib. iii. epist. 35.*

† *Sepulch. tom. ii. p. 245.*

progress of the treatment of their wounds both these states of the liver, and of which they have died, although these men went into battle in perfect health.*

Mr. Abernethy† conceives, that whatever may be the nature of the injury which the brain sustains, the disorder induced in that organ must produce a proportionate disorder in all the digestive organs, and that the re-action of the latter affection aggravates the former. Bertrand, Andouille,‡ Richter, Portal, Cheston, and many others, illustrate the reciprocal connexion and action between the brain and the liver.

Insanity is indubitably oftener produced sympathetically by the morbid action of the liver, than by that of any other organ of the body.

The late Dr. Saunders particularly adverts to the sympathy existing between this organ and the brain, especially in maniacal persons, in whom, as he justly remarks, there is often a defective secretion of bile.||

The supposed influence of the bile in generating insanity is of very ancient date. Hippocrates says, § he visited Democritus to judge of his sanity, at the request of the citizens of Abdera, who thought him mad. He found the philosopher dissecting animals, in order that he might examine the liver, and endeavour if, in the nature of the bile, he could discover the cause of insanity. He also remarks in the case of Apollonius, that there was a tumour in the region of the liver, accompanied by insanity, and that the patient died phrenitic.¶

No organ has its functions so readily and frequently deranged; nor are the lesions of any one attended with

* Dict. des Sciences Méd. art. *Foie*.

† Obs. on Injuries of the Head.

‡ Mém. de l'Académie de Chirurg. tom. iii. pp. 484, 506.

|| Treatise on the Liver, p. 154.

§ Epist. Damogeto, sect. 8.

¶ De Morb. Vulg. lib. iii. sect. 8.

such various, anomalous, and alarming symptoms. Possessing little sensibility in itself, its incipient disorders are very obscure, and often arrive at a great height before they are detected. Assuredly, in other viscera also a morbid condition sometimes lurks, which is unsuspected ; but considering the rank the liver holds in the animal economy, its lesions longer and oftener elude notice. Hence, in seeking the remote causes of insanity, we should ever be mindful to examine whether the functions of the liver be disturbed.

The passage of gall-stones from the site of formation through the ducts, is sometimes attended with a long delirium, which, from its continuance, might be mistaken for insanity.

About nine years ago, the wife of a medical friend continued for two months in a state of delirium, so entire that a ray of reason did not break in. There was great restlessness, with quick pulse, dry skin, the tongue dry, brown, and furred ; and she became much emaciated. When reason began to dawn, she expressed an earnest desire to be left alone that night, as she was convinced, if not disturbed by others, she should have some sound rest. Her request was complied with, and she slept uninterruptedly fifteen hours. She awoke amazingly refreshed ; and from that moment her mental and bodily health rapidly recovered. She then went into the country, where she remained two months, and returned home lusty, and in excellent health. Three days after she returned, she was seized with vomiting, which lasted for many hours. On the following day she took an aperient, during the operation of which she experienced a distinct sensation, as if something had given way in her right side. The succeeding morning she had a natural evacuation of the bowels ; and upon examining the contents, she discovered two singularly large gall-stones.

These I examined minutely : one weighed three drachms, the circumference was three inches, and the length one inch and a quarter ; the other weighed ninety-two grains and a half, the circumference was two inches and a half, and the length one inch and an eighth. She has since experienced no return of her complaints.

The mental derangement in this case was probably kept up during the two months, when there were symptoms indicative of the inflammation which the passing of such comparatively large masses must have occasioned.

As delirium supervened on the commencement of the attack, she was of course incapable of accurately describing the seat of her sufferings. The cause, therefore, was not suspected, till discovered by the patient's own sensations, and examination of her dejections.

This case forcibly illustrates the necessity of watching most minutely every sign and expression indicative of bodily pain, as well as of disordered function, in cases attended by delirium.

If diseases of remote organs have such influence on the brain, it would seem, *à fortiori*, that when so important an organ as the heart is the seat of considerable disease, the functions of the brain would be early and greatly affected. This, however, does not appear to occur so often when this organ itself is diseased, as when the vessels connected with it are altered in structure, whereby the medium through which the circulation is conducted is impaired or obstructed.

The brain is very sensible and responsive to morbid affections of the uterine and generative systems ; and insanity is a frequent consequence. The generative system especially is often sympathising with cerebral irritation and deranged intellectual function. Even a wound, or local irritation of the extremity of a nerve, may produce the same effect on the brain as if an important

organ were injured. The real cause is then often overlooked, merely because the cause and the effect do not appear commensurate.

Substances lodged in the stomach and alimentary canal are common causes, by sympathy, of mental disorders. Van Helmont has dwelt much on the subject of delirium excited by offending ingesta. He cites a case of one who, in a fit of colic, swallowed some seeds of henbane, by which the pain was appeased, but furious delirium ensued, which was relieved by the expulsion of the seeds by an emetic.* Champignons and many other poisonous vegetables have produced similar effects, which have been removed by similar means.†

Beddoes relates the curious effects of eating the *morellus furiosus* on two young girls.‡ All the limbs became agitated with slight convulsive movements; the gestures became violent; the looks furious; and immoderate sardonic laughter succeeded tears of agony. They uttered impudent expressions, and bit and tore every thing. The sphincters were relaxed, and the inferior extremities were palsied. This state of frenzy lasted twenty-four hours. An emetic brought up the morel as fresh as when eaten, and in half an hour they were as well as ever.

Intestinal worms often affect the functions of the brain, and are said, though I never knew a case, to induce mania.

Furious madness is sometimes produced by irritation mechanically applied to a remote part. Hufeland mentions a boy, between thirteen and fourteen years of age, who suddenly began to talk in a very wild and incoherent way, and at length became ungovernable. This state was assuaged by soporifics. But the paroxysm was observed

* Oper. omn. par. ii.

† Tissot, Traité des Nerfs, tom. iv.

‡ Researches on Fever, p. 142.

to recur whenever he was placed on his feet. On examination, a reddish spot was noticed in one foot, which, when pressed, always occasioned a fresh paroxysm. Upon an incision being made, a minute piece of glass was discovered and extracted. During the operation the patient was furious; but every symptom of violence vanished when the offending cause was removed.

Rheusch and Boerhaave have marked the occurrence of mental disorders from those of the mesentery and intestines. The iliac passion, according to them, occasions, first, delirium, then convulsions and madness. The former remarks, that wounds of the mesentery are never exempt from delirium.* Lacaze endeavours to explain the particular correspondence of the brain with other organs, and especially with the diaphragm.

Those constitutional peculiarities denominated idiosyncrasies may be classed among morbid sympathies; but they often possess more permanency of character; for, like the maniacal, apoplectic, gouty, and other diatheses, they may be propagated through successive generations. They have this further similitude: they are not developed before puberty—a period when all the functions, intellectual and sentient, attain perfection.

In the dead, when research is carried so far, anatomy cannot detect in the organisation of persons of such peculiar constitutions, any perceptible difference.

These are among the arcana which are known only to HIM who knoweth all things.

3. *Conversion.*

The conversion, like the relation of diseases, is a neglected part of pathology. Ferriar remarks, that Hippocrates, and his annotators, Baglivi and Castro, were the only medical writers who had attended to this subject.

* Prælect. tom. ii. p. 424.

Parry, however, since Ferriar, has added many pertinent observations upon it; and fully shews how highly essential a knowledge of such conversions is in a review of the causes of mental derangement.

Most diseases are susceptible of conversion. Heberden suggests, that madness, like gout, absorbs other distempers, and turns them perfectly to its own nature. Ferriar and Parry adduce many examples of conversion. The diseases which most frequently interchange with insanity are those in which the circulation is obviously disordered; as in various forms of idiopathic fever, apoplexy, hemiplegia, epilepsy, convulsions, cephalic and comatose affections, hæmorrhagic and hydropic complaints, gout, rheumatism, phthisis, asthma, &c.; and all these diseases may alternate with mania, or with each other.

Insanity may be completely converted into another disease; in which case it performs a radical cure of the mental affection.

The conversion of one disease into another, however, is not always a safe or desirable process; for a very simple disease may be converted into one of a different and more dangerous character, as well as into mania.

It is essential to study the affinity of diseases, to be aware of conversions, and the diseases into which any one is most likely to change; for it may be received as a general rule, with exceptions undoubtedly, that such conversions are confined to diseases having relationship and one common origin.

There is no doubt that insanity would be still more frequent, were it not for the intervention of other diseases, through which the labouring system finds relief; so, on the other hand, it is often induced when it would not have been developed, had not the course of a disease been injudiciously or accidentally interrupted and changed.

When any disease disappears on the accession of

insanity, it is not always the effect of conversion ; but is frequently the simple translation of a morbid action from a diseased part to the brain, where the effect produced is a distinct and dissimilar affection :—it is, in fact, mere metastasis, not conversion. If effusion follow inflammation, this is not the conversion of one disease into another, but the natural termination of the original disease.

When insanity has ensued by conversion, it has often proved a salutary operation, as far as bodily health and a means of prolonging life are concerned.

Insanity produced by conversion from other diseases, is probably always arising from the change of determination of blood from the part or parts originally affected to some part of the encephalon ; and is a link in the chain of phenomena derived from excessive local momentum of the arterial system. When these conversions succeed each other, or alternate, they may be suspected to proceed from excessive determinations shifting from one part to another.

This mode of terminating a disease may sometimes be anticipated by a nice observer. When the indication of a new and not dangerous malady appears in a case of insanity, it should be encouraged ; since, if it be established, it probably will relieve or remove the mental derangement, unless that originate in some organic or mechanical cause. The prognostic will be more certain when there is a natural relation of the new disease to the primitive one. Thus, when a disease owes its origin to irritation producing stimulation and excitation, it is often removed by applying counter-irritants to some part of the body, and there producing analogous stimulation and excitation. Such applications act by derivation. Among the artificial means of accomplishing this end, are setons, issues, the moxa, caustics, blisters, emetic tartar applied externally, rubefacients, &c. : salivation, whether spon-

taneous or artificial, is of this class of remedies: the natural and most common means is hydropic effusions. By any of these modes, probably, the balance of the circulation is restored, and also the reciprocal action of the nervous and vascular systems; and hence often the cure of insanity.

Of all changes of diseases, that of insanity into dropsy is perhaps the most frequent. But agreeably to the conclusion, that insanity is the effect generally of preternatural determination and consequent excitation, effusions of fluids must be considered as natural terminations of super-excitation, and not as conversion of one into another disease. An exception, however, to effusion proving a cure to insanity seems to obtain, when the deposition occurs within the brain or its envelopes. Effusion into other parts immediately relieves the excessive momentum of arterial action, by the capability of surrounding parts to accommodate the effused fluid without much disturbance to the functions they exercise, and the facility with which the absorbents remove it. But when effusion is consequent on great vascular excitation in the brain, it is otherwise; for the accumulated fluid has no vent into contiguous parts, and the absorbing vessels being fewer in that organ, it is not so readily taken up. Consequently, the quantity of blood flowing within the encephalon is diminished, and hence the co-operation of the nervous and vascular systems is no longer maintained.

When dropsy has been converted into mania, it has been ascribed to the increased power given to the absorbent and discerning vessels, by the augmented stimulus of the sensorium, by which the morbid action producing intellectual disorder has been induced.

Unquestionably, what adds tone to any set of vessels, may enable them to recover from or shift a morbid action. The increased action, therefore, in the vessels of a parti-

cular part which has caused effusion may cease, when that effusion, which is the effect, is completed; but still, the balance of the circulation not being restored, a diseased action may arise in the brain, and occasion mania; and there, although effusion occur, yet, for the reasons adduced, the mind is not thereby restored to sanity.

The mental derangement induced by these conversions is sometimes simple delirium, sometimes real mania. The first is generally the consequence of febrile excitement; but the latter is without fever, and is probably, when from conversion, the effect of a change of site of a morbid action. If it be the delirium of fever only, it will cease with its cause; if it be mania proceeding from the latter cause, and fever supervene, and the intellects should recover during the progress of fever, there may be some danger of relapse at the cessation of it. On the contrary, if the powers of reason gradually unfold as fever declines, or after it has altogether ceased, the sanity may be perfect and permanent. These are very important considerations, and should never be lost sight of by those who study the nature and phenomena of insanity.

Such are some of the diseased conditions of the human body, which primarily or secondarily induce, or alternate with, or succeed, insanity.

Even this brief notice of them, and the probable intervention and influence of their mysterious agency, if it do not explain, points out the sources of many morbid actions in organs remote from each other. It likewise shews the relation of several diseases one to the other, and especially to insanity, and the facility of conversion, which further exemplifies their connexion.

Notwithstanding some attention has been recently given to the conversion of diseases, it is a subject which presents a wide field for observation; and when more

fully investigated, many morbid phenomena, which are now regarded as mysterious, will be explained.

Hence, every one must be convinced how much it behoves him, before he attempts to remove even insanity, to reflect upon the probability, whether, in so doing, he may not produce a worse, that is, a fatal disease. I am quite certain I have seen several cases of mental derangement occasioned by a too busy interference with the processes to which nature resorts for the restoration of health.

COMMENTARY XI.

FATAL DISEASES CONSEQUENT ON INSANITY.

THERE are certain morbid conditions to which the insane are especially prone, and which generally terminate in death: these, therefore, constitute an important part of the pathology of insanity.

Some, as apoplexy, paralysis, epilepsy, and other cerebral affections, I have shewn are frequently the causes of mental derangement, or become complicated with it, and that they are likewise sometimes the consequences of it. Whether, however, the cause or effect, I have nothing further to observe, except that they often prove mortal.

But as insanity is proved also to be a malady tending, either directly or indirectly, to shorten life, through the influence of certain diseases, I shall briefly particularise those affections. Their characters, as well as frequency, necessarily vary with the duration of the maniacal action and the situation of the patient.

Individuals who, possessing the means, have assistance as soon as symptoms of disease appear, preserve the identity of their maladies. In large communities of the sick, however, every medical observer must have remarked the singular extension and peculiar effects of some maladies on the constitutions of the patients, and that diseases often there assume characters quite anomalous and unknown in private practice.

So in regard to the insane: in very small establishments the character of the diseases generally attacking them differs materially from those which they experience when congregated in large numbers.

We collect no very precise information of the nature of the maladies to which the insane are most liable, and which prove mortal in British lunatic asylums. As to epidemics, the system of management is happily so improved in these institutions, that they scarcely ever prevail.

In the Lancaster County Asylum, atrophy, hydrothorax, and bowel complaints, chiefly occur. Dysentery is alleged by a late writer to be very common and fatal in that excellent institution; and this effect was said to be produced by the unwholesomeness of the water. But this report has since been disproved by an inquiry which was instituted for that purpose.

In the Cork Asylum, in which a thirteenth part of the patients admitted are reported by Dr. Hallaran to be insane from excessive drinking, — a fever, *sui generis*, continuing six or seven weeks, and even three months, but eventually giving way, was the most common disease. Affections of the liver are also very rife, inducing apoplexy and palsy, hydropic effusions, and œdematous swellings of the lower extremities. Fever is so constantly prevailing in most of the populous towns in Ireland, that the greater prevalence of this disease in the Cork Asylum, comparatively with others, may easily be accounted for. The large number of habitual drinkers of spirits will readily explain, too, why apoplexy, palsy, and dropsies, should exceed.

The most frequent fatal cases in the Glasgow Asylum, of late years, are from apoplexy, palsy, atrophy, exhaustion, and pulmonary and dropsical affections.

The French commission, with that minuteness of detail which all their reports relative to the insane now embrace, have thus nosographically classed the affections of which the inmates of the Paris lunatic hospitals have died in the years 1822, 1823, and 1824: —

Organic diseases of the brain and its membranes ..	418
Diseases of the thoracic organs.....	198
Inflammations of the abdominal organs	306
Cutaneous inflammations	3
Cachexies	110
Chirurgical diseases	47
Diseases undetermined	9
	<hr/> 1091*

The report does not particularise the diseases included in this pathological arrangement; but those of the encephalon greatly preponderate.

It must be objected to these details, that it is quite impossible always to decide by dissection, whether morbid appearances are causes or effects; and it is still more rarely possible to discover from the histories of the cases of lunatics, or from their own description, either the actual seat of disease, or what may be the degree of pain which a lunatic feels. This information is rather to be collected from extrinsic circumstances, which are more or less distinct from their own recognition.

Upon this point Georget remarks, that when we see an insane person become calm, avoid tumult, and rather seek solitude or his bed, and lose his appetite, he ought to be strictly examined, to see whether he be not suffering from some ailment. If weakness increase, and there is a distaste for food, and his features sink, there can be no doubt that his health is declining: either an acute disease is approaching, or already exists. The most common which present themselves in this way are gastro-intestinal diseases. Chronic maladies develop themselves not more insidiously: they appear almost always, and in every individual, with signs of atony only, and general weakness.

Besides the diseases to which I have referred as ter-

* *Compte rendu*, Tab. No. 15.

5. Dec. 1882

On Skin.

Burrows Mammals

Loudon River

Loudon Hygiene

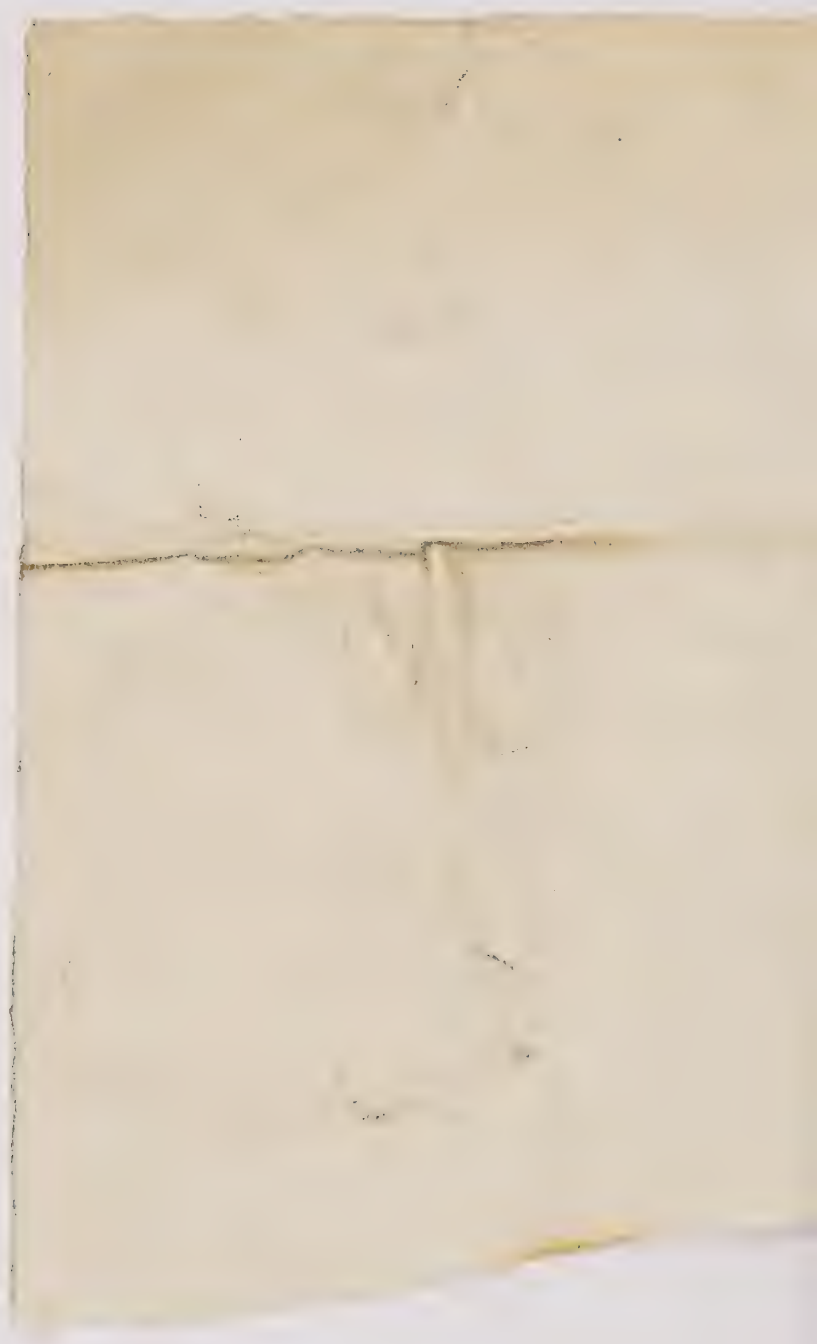
Loudon Pathologic

Loudon on Chest.

Loudon on Liver.

Med & Phys Journal

Harrison on Spine



minating insanity, the following are common:—1. *Atony*. 2. *Consumption*—3. *Chronic inflammation of the bowels, dysentery, and colliquative diarrhœa*—4. *Affections of the liver*—5. *Constipation*—6. *Sudden debility*—7. *Mortification of the extremities*—8. *Scurvy*.

1. *Atony*.

As a general observation, it may be remarked, that there is a state of atony generally accompanying all chronic diseases of the insane. Their physical as well as their intellectual powers deteriorate, and their bodies waste and become exceedingly attenuated. The colour, nay even the texture, of the skin alters; and it is rare to find an incurable who preserves a healthy tone and appearance. In an atonic condition of the constitution, the features will be changed; but in the atonic state of lunacy they vary so remarkably as to be scarcely cognisable, and the patient always looks much older.

2. *Consumption*.

Phthisis kills more than half the lunatics in La Salpêtrière. This disease is certainly frequent among insane people, and a great cause of their mortality in all countries. It often exists, indeed, in cases where it is never suspected. Whenever extreme emaciation accompanies mental derangement in any form, and there is no reason to imagine that it arises from a diseased state of the mesenteric glands or inanition, latent phthisis may be suspected. In every such case, inquiry should be made of the patient's friends, whether a phthisical diathesis prevails in the family, or whether, before insanity was developed, any pulmonary symptoms had been manifested. Indeed, I have seen many cases of insanity where great extenuation has been exhibited, but not one symptom of pulmonary affection—neither thoracic pains, cough, nor expectoration, till just before dissolution, when

the two last symptoms have suddenly appeared; and yet, upon a *post-mortem* examination, the most extensive marks of inflammation of the lungs or investing membrane, or abscesses in the substance filled with pus, have been disclosed.

Perhaps in all these cases, if strictly inquired into, the attack of acute pulmonary symptoms, though only at the time considered as a common cold, might be recollected, and also that they as suddenly receded or were suspended.

This suspension of phthisis I have known continue for many months; and when the symptoms recur, death, it may be prognosticated, is near.

Consumption, however, among the insane, is by no means so frequent a cause of mortality in public or private practice in England, as Esquirol and Georget report it to be in France.

3. *Chronic Inflammation of the Bowels, Dysentery, and colliquative Diarrhæa.*

A chronic inflammatory state of the mucous membrane of the intestines is a common and fatal affection in long-standing insanity. It is generally accompanied by a looseness, and frequent desire of going to stool. This complaint partakes more of the nature of *dysentery*, and requires a correspondent treatment, always having in view the ever-attendant debility of the patient. There is rarely any pain, even on pressure of the abdomen.

Pure dysentery, however, is not an ordinary affection in lunatic asylums. Whenever it appears, it is generally in the form of an epidemic, and is then produced by some fault in the diet of the patients, or local cause. In such case it generally proves, among the old lunatics, very fatal.

Colliquative diarrhæa is a much more common ailment towards the close of ancient cases of insanity. At

first, the attacks perhaps are slight, and easily checked by the ordinary remedies ; but soon they become more violent, and the evacuations more frequent and abundant. In the latter stage, the patients are quickly carried off by it.

All these affections of the bowels are more rife, and will prove more fatal, in asylums where poor lunatics are received than elsewhere. Possibly, to a certain degree, they are always epidemic ; certainly, sometimes endemic.

4. *Affections of the Liver.*

Organic lesions of the liver proved mortal, according to Esquirol, in 35 out of 277 deaths, or 1 in 8.

That cysts, tubercles, chronic inflammation, induration, &c., of this viscus, have frequently been detected in the dead, when neither pain, jaundice, nor other indication, while living, had excited a suspicion of hepatic disease, is a well-known fact. Equally well known is the influence which this organ and the brain reciprocally exercise on each other. We cannot, therefore, question, especially among the poor, many of whom have been addicted to the abuse of spirituous liquors, that a morbid condition of the liver is a frequent termination of life in lunatics.

I am not, however, disposed to consider, when organic lesions of the liver are discovered in the bodies of insane persons, that death, in the proportion Esquirol infers, is the consequence of that condition. Diseased hepatic function may originate diseased cerebral function, and the latter may persist, when the former has entirely ceased. Therefore, if a lesion in either organ be detected, we still cannot decide which is cause and which effect. The same difficulty always presents itself when the corpses of insane persons exhibit morbid appearances.

If, however, death be not often the immediate effect of a lesion or disease of the liver, yet, among the insane

as well as the sane, such conditions of it are the frequent remote causes of other diseases; such as dropsies, gastric affections, and disorders of the bowels, which largely contribute to the mortality of lunatics.

5. Constipation.

There is an opposite condition of the bowels to that just referred to, and to which old lunatics when they become very feeble are especially liable, and that is, extreme constipation. Sometimes they will pass several weeks without a single stool, till there is such an immense accumulation of fæcal matter, that the patients, if not relieved by art, are in imminent danger. This accumulation is vulgarly called a ball-stool. I am aware it is not confined to insane persons, but is common to senility. Ordinary constipation is a frequent and troublesome symptom of insanity; but this peculiar obstruction does not present itself among lunatics, except in cases of long duration, and where the patient is reduced by the disease, rather than by years, to that general state of atony, the concomitant of extreme age.

The intestines in this case participate in the general insensibility and torpor of the whole system; hence the secretions are diminished and become indurated, the peristaltic motion is enfeebled, and the power of the rectum and abdominal muscles, by which the alvine evacuations are expelled, is diminished or lost.

When old lunatics are in this atonic state, and no stool has for a very long time passed, before drastic purgatives, or even stimulating clysters, are administered, an examination *per anum* should take place. If an accumulated and hardened mass be found, nothing will relieve the patient but the introduction into the rectum of some convenient instrument, such as a spoon, by which it may be broken down and brought away.

I have known dangerous consequences arise when this

obstruction has been attempted to be removed by the exhibition of repeated and strong purgatives, which, failing of the intended effect, have collected in the stomach and superior intestines; and upon the passage being freed, have induced superpurgation. If such remedies have been given, upon discovery of the real nature of the case, precautionary means should be taken to prevent the violent catharsis they may produce, after the lower intestine is relieved of the indurated colluvies. A little care, and the occasional injection of simple clysters, will prevent the recurrence of this kind of constipation.

6. *Sudden Debility.*

Death sometimes supervenes upon a sudden state of debility; particularly in cases of melancholia, which have continued some months, or longer. The patient may be in the usual health he has maintained since the access of insanity, and there is no alteration in any of the animal functions which indicates danger; he complains of faintness; the face is pale, the features contract, appetite is defective, pulse small and intermitting, and there is sudden prostration of strength; and most commonly, in spite of every remedy and care, in a few, perhaps in a couple of days, he succumbs.

I have met with this fatal termination by sudden debility in several patients, who, neither from age, inanition, nor from any remedial treatment, intimated the least danger. Neither have I, from the examination of their corpses, been able to detect any assignable cause for the event. A slight turgescence of the cerebral blood-vessels, and a little fluid in the ventricles, have been the only signs visible of a morbid action. In three out of five of these dissections, the brain was quite healthy.

It is principally from observing these cases of death succeeding sudden debility without any apparent cause

except mental depression, and likewise that many diseases of the insane run on to a fatal issue with greater rapidity than generally attends on similar diseases where the mind is sane, that I have been induced to conclude, that the prognosis is always most unfavourable where the principle of intelligence is degenerated or alienated.

7. *Mortification of the Extremities.*

Most writers on insanity mention the liability of lunatics confined in asylums to mortification of the lower extremities. This occurrence has by some been ascribed to extreme neglect, or from an improper exposure to cold; it having been a pretty general opinion, that all lunatics were insensible to atmospheric impressions and changes. Certainly, however, no conclusion can be more erroneous than that insane persons are insusceptible of the extremes of temperature. Experience proves the contrary to be the fact.

I confess it is quite wonderful to me how it could have escaped observation, as I suppose it must, that lunatics, especially melancholics, are commonly subject to an extremely languid circulation in the lower extremities; and therefore, without extraordinary care, must of course suffer greatly from cold.

Extremes of heat and cold are not only in themselves causes of insanity, but sensibly affect both the bodily and mental state of most lunatics. In whatever asylum the patients are treated under the conviction that they are insensible of cold, there, assuredly, mortification of the extremities will be common. In most of the British lunatic asylums which I have inspected since the year 1821, I found proper care taken to prevent injury from cold. Indeed, I had frequent occasion to remark, that the day-rooms were sometimes too much heated; so that when the patients went from those rooms into the galleries and airing-grounds, the atmospheric change was too

great; and hence catarrhal, ophthalmic, and rheumatic affections were induced. But in others the patients were by no means sufficiently protected from the effects of cold, and, as might be expected, I there found mortification of the extremities less rare.

But this affection is not always the simple effect of exposure to cold, or of neglect of any kind. I have met with instances of it in private practice, where an aptitude seemed to exist to this morbid condition of the system. This I have attributed to that diminution of the vital principle which I have noticed to be so often conspicuous in the constitution of persons in whom the influence of the intelligent principle is deteriorated. I will quote two examples. A gentleman, aged thirty-six, had injured one foot severely in an attempt to commit suicide by burning himself; the inflammation was great, mortification ensued, and his toes in a few weeks sloughed away. Three months after this circumstance, and in warm weather, inflammation appeared on the instep of the other foot, and soon included the toes: it proceeded exactly as in the foot which was burned; and mortification and sloughing-off of these toes followed, notwithstanding every aid the best professional advice and attention offered. Mr. Stanley, of St. Bartholomew's Hospital, and Dr. Arnould, of Peckham, attended with me in this case. In the other instance, a gentleman, aged twenty-six, a free liver, was seized with mania at Brighton, whence he was brought to town. As he was very violent, depletory measures were adopted for four or five days, and he was then removed into country lodgings. I there first visited him. I found him still violent and very incoherent, with a small, quick pulse, foul tongue, and his stomach so irritable that it would scarcely bear any thing. A medical gentleman in the country had visited him before me, and ordered his head to be shaved, leeches to be applied, and a tartarised

antimonial warm plaster to be extended over the whole scalp. I suspect that the gastric irritation may have been owing to absorption of the antimony, for it ceased altogether next day.

In a few days, notwithstanding he was well supported, the vital powers seemed sinking; and at this juncture the whole of one foot suddenly became inflamed. It shortly put on a disposition to sphacelus. In a case where life was threatened, the delirium was of minor consideration; therefore bark, cayenne, opium, and a moderate quantity of wine, and stimulating applications to the inflamed parts, were exhibited. These means arrested the progress of mortification, and a healthy action was gradually resumed. A week afterwards, the other foot assumed exactly the same aspect, and threatened gangrene; but by persisting in the same plan, the powers of life rallied, and the second foot got well. The general health now mended fast; as that improved, the state of mind corresponded, and in about six weeks from the attack of mania he quite recovered.

In the second case, from the previous habits of the patient, and subsequent depletion and reduction, a state of sphacelus was by no means an unlikely consequence, had there been any wound or even abrasion of the skin on any part of the body; but the spontaneous inflammation, and successive proneness to mortification of the feet, support, I think, the inference I have deduced, that frequently there is an idiosyncrasy of constitution where the maniacal action exists, favourable to mortification of the extremities.

Possibly, this peculiar constitution may be analogous to that to which Pott refers, in cases of mortification of the extremities not dissimilar.*

* Chirur. Works, vol. iii.

8. *Scurvy.*

This disease has made great ravages among the lunatics in the French hospitals. It chiefly attacks the melancholic or fatuous, and imbecile paralytics, who, with all the accustomed symptoms of scurvy, fall into a state of heaviness and stupor, and perish.

Scurvy generally has its origin in locality, want of good pure air, or defective nutriment; and is the concomitant of that state of atrophy consequent thereon.

Probably from somewhat similar causes, scurvy and flux very much prevailed in Old Bethlem about fifty years ago.* These disorders, however, subsided upon a more generous diet being introduced. Scurvy is now wholly banished from every British lunatic asylum; dysentery is very rare; and chronic diarrhœa, which is meant by flux, and which in all situations seems the inheritance of inveterate lunacy, is infinitely less common.

In the French hospitals, the fatal occurrence of scurvy in so great a degree has been ascribed to the damp and comfortless state of the courts and lodges where the imbeciles are kept; but the late improvements in the buildings for the accommodation of this class of patients are reported to have already checked the prevalence of this disease in La Salpêtrière.

* Hist. Account of Bethlem Hosp. 1783, p. 10, *in notâ.*

COMMENTARY XII.

A SYNOPSIS OF FATAL DISEASES OF INSANE PERSONS.

THIS includes all the diseases which have had a fatal termination among the insane upon whom I have professionally attended in the last thirteen years. It is impossible to contrast them with the number of patients who have come under my care, because many have been removed before their cases were finished. I have placed the diseases numerically, and without reference to any classification :—

Apoplexies and Sudden Death	18
Atrophy	15
Palsies	13
Consumption	9
Hydropic Effusions	8
Sudden Debility in Melancholia,	8
Insanity Puerperal	7
Convulsions	5
Epilepsy	4
Chronic Diarrhœa.....	4
Mania (furious)	3
Delirium tremens.....	3
Delirium senile	3
Delirium (low)	2
Typhus (mitior)	2
Asthma	2
Mortification	3
Hemiplegia	1
Scarlet Fever.....	1
Inflammation of the Brain	4
————— Bowels	2
————— Womb	1
————— Stomach	1
————— Lungs	1
Disease of the Heart.....	1
Dropsy of the Chest.....	1
Dysentery	1
Coma	1
Carbuncle	1

COMMENTARY XIII.

CLIMATE, OCCUPATION, SEX, AGE.

AMONG other causes influencing insanity, *Climate*, *Occupation*, *Sex*, and *Age*, are ordinarily enumerated. Each therefore demands some notice.

1. *Climate*.

The inhabitants of particular countries have been supposed to possess more or less talent and wit; and others to be more or less obnoxious to mental derangement.

Whether the first position holds, it is not my province to examine; the second certainly is founded on very questionable authority.

Again, mania has been considered as specially attaching to the inhabitants of this, melancholy to that, and suicide to another, country. But this prepossession is gradually dissipating, as investigation of the subject proceeds; for it is clear, that each form of insanity is to be found in every civilised nation of the world. Of course, one form may preponderate more than another, according with the moral, civil, and religious condition of the people; but observation disproves the notion, that the form is governed by peculiar climes.

A particular and obnoxious state of the atmosphere may obtain, at certain seasons and places, very inimical to the human constitution, and induce that morbid condition of it which is favourable to the development of mental derangement. This happens where obstinate intermittents prevail.

Insanity is clearly endemical : it has its remote cause often in palludal miasma, as in Lombardy, and may occur in one country as well as in another.

Mental derangement is a consequence of insolation, which is more likely to happen in the torrid than in the temperate zone ; but a *coup de soleil* may occur in hot weather any where under too great exposure to the vertical rays of the sun. A high state of inflammation of the encephalon immediately follows ; and if the patient survive, permanent intellectual derangement is a frequent consequence.

In some so predisposed, trivial exposure to the solar rays will induce cerebral inflammation and high delirium. The midsummer of 1826 was excessively hot. In one of the days when the temperature was at the highest, a lady who had been sitting reading in her garden, but under the shade of trees, was suddenly seized with an agonising pain in the head ; fever followed, and shortly furious delirium. She died in a few days. Upon opening the head, there were marks of recent high inflammation of the membranes, and likewise of long-standing disease ; and on the surface of the brain an ulcer as large as a shilling was found.

This case is, besides, an example how much patients are themselves deceived as to the seat of their diseases. This lady had been complaining for several years ; but referred all her sufferings to the site of the abdomen, and had often said, that when she was dead, there would be found the seat of her disorder. Upon the most careful examination of the viscera, however, not a trace of disease could be found. Did not these uneasy sensations in the abdomen arise from sympathy with the brain, which had, during the whole period, been the seat of a morbid irritation, and which slight insolation excited to an active state of inflammation ?

Whether a native of the north visits the south, or

vice versâ, it does not follow that he is subject to insanity more than a native of the soil. A native of one part of the tropics removed into another part of the same region, is perhaps quite as liable to become a victim to this affection.

Humboldt mentions,* that a young and robust negro, born in Guinea, on his arrival at Cumana, in South America, went mad; and he infers, because this negro had lived some years on the high plain of Castile (Old Spain), that his organisation had acquired that kind of irritability which renders the miasma of the torrid zone so dangerous to the inhabitants of northern regions. That miasma will so deteriorate the constitution as to make it more prone to the maniacal action, we know; and doubtless, the native of Guinea, who had become in constitution European, might experience this change as well as a native of the temperate region.

I have met with two facts which favour the position, that natives of the torrid zone upon becoming *acclimaté* in England, may be soon affected by mental derangement. One was a youth of Madagascar, not arrived at puberty, who had been brought over by the Missionary Society to be educated and instructed in the principles of Christianity. He could read a little, but could not speak English. He was in a state of melancholia, and after being in my establishment three or four months, recovered and went home. The other was a native of South America, and a well-educated young man. He also sunk into melancholia. There was no apparent cause in either case to occasion insanity.

Madness is less frequent in the East Indies, in South America, or in South Carolina, where the heat, according to Dr. Wells,† is very great, than in this country. From a statistical account published last year,

* Personal Narrative, vol. ii. p. 191.

† Trans. Soc. for imp. Med. and Chir. Know. vol. iii. p. 527.

it appears that insanity is very rare in Spain, although the heat is there intense, and the cold never severe. In Copenhagen it is very common, where the extremes of heat and cold are very great.

Insanity was equally prevalent in Paris and London during the spring of the year 1817. M. Villeneuve observed, that the paroxysm commenced when the atmosphere was warm, humid, and cloudy, and continued its intensity so long as the barometer indicated stormy, and announced no retrograde change.* Whether these remarks are just, I will not determine; but it should be remembered, that this year, in Paris especially, was one of great scarcity and distress.

Climate, therefore, does not appear to be an exciting cause of insanity. But it cannot be denied that the seasons are so; and that when the thermometer is highest in temperate regions, the number of insane is greatly augmented. Thus in Paris, on an average of nine years,† it uniformly increased in May, arrived at the maximum in July, and thence gradually decreased till January, when it was reduced to the minimum. Summer and autumn, therefore, produce more insanity generally; but, judging from my own experience, winter sometimes is equally productive of this malady.

That species of mental derangement exhibiting a propensity to self-destruction, always prevails most in the hottest season. From registers published in the cities of Westminster, Paris, and Hamburgh, we find that in June and July suicide exceeds. In fact, suicide prevails most when Fahrenheit's thermometer ranges at about 84°.

Hence I think it is conclusive, that it is not climate, but a high temperature, which disposes the intellectual functions to derangement.

* Journ. de Méd. tom. xxxix. p. 308.

† Dict. des Scien. Méd. tom. xvi. p. 166.

2. *Trades and Occupations.*

Different trades and occupations have been supposed much to influence insanity. But I think the mode of investigation adopted is little calculated to elucidate the subject. In the Paris Register* there is a list of about two hundred occupations, which the insane persons admitted into the French hospitals had previously exercised.

It appears, as might have been expected, that there is in this register a vast number of shoe-makers, sempstresses, tailors, clerks, labourers, domestics, &c. But this does not shew that those employments are most obnoxious to insanity; for in every city, persons exercising them must constitute the majority, and consequently more among them will be found insane.

Before any just inference can be deduced from such a list of lunatics, the number of insane of each particular calling should be compared with the number exercising it in health. If such a comparison could be established, the predisposing influence of every occupation to mental derangement would be ascertained.

This comprehensive register, however, confirms the observation, that the employments and moral conditions in life which entail the greatest poverty, and consequent misery, are those which produce the greatest proportion of insanity.

The classification of the insane, also, according to their civil condition, as we see attempted in the French Registers, (*i. e.* whether single, married, widowed, or divorced,) is, especially in a country like France, where these several conditions are morally little regarded, a piece of frivolity utterly useless.

3. *Sex.*

Many circumstances in the physical and moral con-

* *Compte rendu*, Tableau No. 9.

dition of women, from the epoch of puberty to the critical period, would lead us to conclude that more women than men become insane in every country and every place.

“ Par une nécessité sévère,” says Cabanis, “ attachée au rôle que la nature lui assigne, la femme se trouve assujettée a beaucoup d’accidens et d’incommodités: sa vie est presque toujours une suite d’alternatives de bien-être et de souffrance; et trop souvent la souffrance domine.”* This is a true representation, and establishes a *primâ facie* case. Besides, it has ever been supposed, that at the period of the access and final cessation of menstruation, females were more disposed to mental derangement. Cabanis, however, reasons more like a philosopher than a physician; for the French Register shews, that there are fewer females insane than males from the age of ten to nineteen, and not so many females from forty to forty-nine years of age as from thirty to thirty-nine.† This is a result opposite to Esquirol’s experience;‡ and I own that it is likewise so to mine.

Women are certainly exposed to more natural causes of physical excitation and irritation than men. Besides menstruation, gestation, parturition and all its consequences, women also, from education or occupation, are more obnoxious to superstitious and fanatical impressions. Nevertheless, except in large cities, such as Paris, Lyons, and Milan, where immorality and habits prejudicial to the female constitution most prevail, the majority of the insane are men.

It was the opinion of Aretæus,§ Cælius Aurelianus, and other ancient authors, that there were fewer females

* Rap. du Phys. et du Moral de l’Homme, tom. i. p. 356.

† Compte rendu, Tableau No. 11. ‡ Dict. *suprà* cit. p. 173.

§ De Melanch. lib. i. cap. 5.

than men insane; but when the former were affected, that the attack was always more obstinate.

Modern France is the only country where this rule is reversed; but there it seems to apply only to the lower orders; for in Esquirol's private establishment, from 1802 to 1814, the proportions are, men 191, women 144.

In the Royal Asylum of Charenton, the best public lunatic asylum in France, from Jan. 1st, 1815, to Jan. 1st, 1823, 1453 lunatics were admitted; and here also the males preponderate; the proportion being, men 847, women 606.

Of 2507 insane of both sexes admitted into the Paris hospitals, 1095 were men, and 1412 women.

In Lyons the proportion was, men 60, women 150; which does not materially differ from the proportion in Paris.

In England, the total of lunatics confined in private houses, from 1812 to 1824, was 7904; the proportions of the sexes were, men 4461, women 3443. Among the better classes confined in such houses, in London and its environs, the proportion of men to women is nearly the same. But, according to an analysis published of the pauper lunatics in the county of Middlesex, including the metropolis, in 1827, the proportion was stated to be, men 307, women 546.*

In Scotland, in 1818, the proportion was, men 2311, women 2339.

In the Dublin House of Industry, in 1824 and 1827, the sexes admitted were nearly equal.

In the Cork Asylum, from 1798 to 1817, they were the same; but in the provincial asylums of Ireland, the males preponderate.

In Zurich (Switzerland), in 1823, the sexes were nearly equal.

* I suspect that there is some great error in this statement.

In Turin (Cassa de Pazzi), men 180, women 97.

In Genoa (Spedale deglè Incurabili), men 55, women 60.

In Milan (the Senavra), as in the hospitals of Paris and Lyons, the women exceed: from 1802 to 1826, men 2799, women 3207.*

In every part of Germany the men exceed.

In Vienna, 1802, men 177, women 94.

In Berlin (La Charité), 1816, men 242, women 177.

In Pennsylvania (America), 1812, two men to one woman.

These variations in the proportions of the sexes insane appear, at first sight, very remarkable; but it is highly probable that a rational explanation may be found in the moral condition of the people of different countries. This inference is very unfavourable to French female education. Indeed, Esquirol pointedly ascribes the greater equality of insanity between the sexes in England, to the women receiving a more solid education, leading a more domestic life, and taking a less active share in society than in France.†

In taking a retrospect of this statement, it is apparent, that in many cities, among the poor, insane females either preponderate, or are as numerous, or nearly so, as the males: for instance, in the lunatic hospitals of Paris, Lyons, and Milan, the females exceed; in those of Genoa, Dublin, and Cork, they are nearly equal. I conceive it probable that a majority of insane females would be found, on an accurate enumeration of the pauper lunatics of London; but that the disproportion is not so great as given in the analysis alluded to. It is certain, that in the towns and villages remote from the demoralising habits of a condensed population, insanity among females is more rare.

* The women annually admitted do not uniformly exceed the men in this institution.

† *Suprà cit.* p. 171.

In La Salpetrière, a twentieth part of the female lunatics are reckoned to be insane from prostitution. This is a cause always more actively operating in large than in small towns or in the country.

Drunkenness, which prevails most among males, is one reason why, generally, so many more men than women are insane; otherwise, the exciting physical causes to which females are naturally exposed, and from which males are exempt, would possibly have occasioned a different result.

4. *Age.*

At what age the constitution is most prone to insanity, it is of some importance to know. The difficulty of recovery is always progressive with the advance of age. This rule perhaps equally applies in most human diseases. In a prophylactic point of view also, it is desirable to ascertain the age when mental derangement may be expected to be developed, as well as when it most prevails.

Authors mention infants becoming insane; but the only case of this kind distinctly described is one seen by Greding.* He asserts, the child was born mad, and relates acts which he committed, certainly very extraordinary. When this infant commenced teething, he wasted and died. If the description be correct, this was a real case of congenital fury; but unless there was proof of mind, it cannot rank as mental derangement.

Esquirol, in the whole of his extensive experience, does not appear to have met with any case of infantile madness; for he refers only to an insane child two years old, quoted by Jos. Frank, which he had met with in St. Luke's Hospital in 1802, and likewise to the three cases related by Dr. Haslam.† In two of these latter cases, however, I conceive there was decided original

* Crichton, vol. ii. p. 356.

† Observ. &c. chap. iv.

deficiency of intellect; and in the third, where most intelligence was displayed, there was more of moral than mental perversion, so that the boy's perceptions were correct, and no delusion existed.

As a general maxim, insanity cannot occur before the approach of puberty; because previously, the intellectual faculties are not developed, or have not acquired strength to exercise perfect functions.

Nevertheless, I cannot prove that no child was ever insane; but if it occur, such instances are like those remarkable examples of precocity of physical and of mental powers which we sometimes see as exceptions to the general law of nature. Children are often highly nervous, irritable, and eccentric, and evince very acute perceptions and feelings. Here are the elements of a strong propensity to mental derangements. In such constitutions, an erroneous education, or strong exciting cause, such as ill-usage, or sudden fear, might induce an attack of insanity, even at the age of childhood.

At the epoch of puberty, the mind in some is very early and rapidly developed, and with a fecundity of ideas, brilliancy of imagination, and aptitude for the arts or sciences, truly wonderful. Too intense, or ill-directed application, sometimes very soon deranges such minds. This rapid development is more peculiar to girls; and it often happens, that this brilliancy gradually declines, or at once becomes stationary, and the understanding is left in absolute mediocrity. This sudden progress and check of mental power I have witnessed, though more rarely, in boys.

Cabanis and other natural philosophers assume, that the brain and nervous system require the influence of the seminal secretion before it is susceptible of maniacal excitation; and this same influence is supposed by them, when highly or morbidly excited in adults, to be the frequent cause of insanity. Since the development of the

sexual system is contemporaneous with that of the mental faculties, cause and effect may at this age be frequently confounded. Hence I am not disposed to coincide with the French physiologists, who attribute so large a share of insanity to the influence of the sexual passion.

The ages, with reference to the sex of the insane admitted into the French hospitals, are thus stated : —

TABLE OF AGES.

	Men.	Women.	Total.
From 10 to 19	78	62	140
20 to 29	198	267	465
30 to 39	248	324	572
40 to 49	231	290	521
50 to 59	132	218	350
60 to 69	119	146	265
70 to 79	76	101	177
80 to 89	7	4	11
Ages unknown	6	0	6
	<hr/> 1,095	<hr/> 1,412	<hr/> 2,507
Under 50 years of age ..	755	943	1,698
Above 50 years of age ..	340	469	809
			<hr/> 2,507

Thus we find, as might be anticipated, that insanity exceeds in both sexes in the most active period of life, between 30 and 39. In the next decade, the period of life especially critical to females, viz. from 40 to 49, the proportion of insane women to men is as 290 to 231; which, in relation to the totals of each sex admitted, viz. women 1412, and men 1095, shews, either that the critical period does not influence insanity in women so much as is supposed, or that there is some moral exciting cause in the condition of men at this epoch, which is equivalent in effect to this physical exciting cause in the other sex.

PART II.

COMMENTARY I.

DIVISION OF INSANITY.

A DEFINITION suitable to every form of insanity is an *ignis fatuus* in medical philosophy, which all follow, and which eludes and bewilders pursuit.

A profundity of learning and psychological knowledge has been displayed on the subject; but hitherto no two nosologists have coincided even in a general definition of insanity. Hence, as might be expected, nothing but confusion and discrepancies prevail.

Guided by metaphysical and speculative theories, philosophers and physicians attempt definitions of insanity; but none survive the test of rational inquiry. Medicine is not exempt from vanity; and when the physician, for the purpose of display, adopts pure hypothesis for induction, he must expect to fail, and be exposed.

Having traced the sources and connexions of the physical phenomena of mental derangement, and compared them with the manifestations of a morbid mind, the physician should be content with applying the knowledge he has thus acquired to the forming of a sound judgment of the disease, and how most successfully to treat it. Definitions of the morbid phenomena of mind he should leave to schoolmen, who love to indulge in subtilties.

The utility of such definitions in all juridical inquiries, is as problematical, perhaps, as in medicine. The failure of the attempt of the late very erudite Dr. Thomas Arnold, to define the mental characters of insanity, and reduce them to nosological arrangement, sufficiently testifies that it is not to be accomplished.*

Warned by such examples, I shall decline all definitions of the infinite varieties of insanity, and confine myself to a simple division of the most conspicuous and ordinary forms in which it appears.

Except the abortive attempts at definition, nothing more strikingly exemplifies the incertitude respecting the nature and proximate cause of insanity, than the multitude of terms used to designate this malady.

Words are the symbols of our thoughts; and it doubtless would be as advantageous in medicine as in general science, if those only were employed which convey a specific meaning, and were so understood universally. Such, however homely, are preferable which are most intelligible to those for whom we write. Philologists perhaps will cavil at this apparent barbarism; nevertheless, it is just.

If a short retrospect be taken of the nomenclature of mental disorders, we shall be struck with its variety. Thus, we find, the *Deliria* of Sauvages and Sagar; the *Paranoiæ* of Vogel and Swediaur; the *Ideales* of Linnæus; the *Mental Diseases* of Macbride; the *Vesaniæ* of Cullen; the *Paraneurismi* of Young; the *Delirium* of Crichton and Foderé; the *Alienation Mentale* of Pinel; the *Folie* of Esquirol; the *Ecphronia* of Good, &c.

If the learned thus differ, we must not be surprised if popular opinion vacillate on a subject so difficult even to designate.

* Observ. on the Nature, Kinds, Causes, and Prevention of Insanity, vol. ii. p. 93.

Our vernacular tongue is not deficient in synonymes for insanity. *Madness, lunacy, craziness, frenzy, mental derangement, alienation, &c.* are indiscriminately used.

Madness, though authorised by Dr. Haslam's adoption, is one of those words in reference to medicine, as Beddoes remarks, which means every thing and nothing, and is become in its application too vague to mark a specific malady.

Lunacy, sanctioned as it is by scriptural and legal usage, is, notwithstanding, still more objectionable; because from its derivation, *luna*, the moon, it impresses an opinion, even in these enlightened days, of the influence of the phases of that planet on the human mind—an influence which the most accurate observation for many years, in extensive communities of insane persons, contradicts. Besides, it gives rise to an absurd legal distinction in cases of insanity—a distinction without a difference, and which disgraces the code of British jurisprudence.

Craziness is open to the same objection as madness.

Custom has rendered *Frenzy* familiar; and in the sense it is used in colloquial language, that is, ungovernable passion, no harm can arise from it. But the affinity of frenzy to *phrenitis*, which imports an acute and highly dangerous condition of the cerebral organs, proves that it ought not to be adopted in medical discussions without due caution.

Mental alienation is now a familiar phrase with authors of repute. It has ancient and modern authority for its introduction. Aretæus, and Cælius Aurelianus appear to use it as synonymous with insanity; Plater, and more recently, Pinel, adopted it. But surely it is both unphilosophical and inappropriate. For, if one intellectual faculty only be lesed, or even several, and yet others be sound and perfect, the mind of that person so affected is

not alienated. Mental alienation strictly implies an absolute state of fatuity, or idiotism, where previously a sane understanding had existed. The faculties of the mind in cases of insanity may aberrate, or be exalted, or weakened, but they are not abolished. Besides, this term generalises too much; since it excludes the possible occurrence of intermitting insanity, and confounds all distinctions between acquired and congenital mental imbecility.

Hallucination, or the phantasy of a distempered mind, has been treated with the consideration due to the pathognomonic sign of a corporeal disease. Esquirol, in a memoir read in 1817 to the Royal Academy of Sciences of Paris, endeavoured to shew that *hallucination* or illusion ought to rank as a genus of *vesaniæ*. Crichton and Darwin have given it this rank; and Good, under *alusia*, has made it his third genus of *phrenica*. Sauvages and Sagar class *hallucination* as an order. The neglect into which all these nosological attempts have fallen, evinces how little they merit record.

I perfectly accord with the philosopher who teaches, that it is more important to investigate diseases and examine their appropriate symptoms, than to debate about nomenclatures, and genera, and species. But it must be confessed, that it is no less important that a disease should have a determinate designation, by which it may be recognised by all. Consequently, it were very desirable that one should be preferred not liable to be misunderstood.

Insania, whence *Insanity*, has been recognised in medical language on sufficient authority, ancient and modern, and has become almost idiomatic in this country. I have therefore adopted it, generically, to comprise every form of intellectual disorder.

All the causes, physical and moral, of insanity have

existed since the origin of man. Hence we may conclude, that all those forms which the moderns have arranged as so many genera or species, were familiar to the ancients, who, above all, were most exact in clinical observation and accurate delineation of symptoms. They were content with simply dividing all mental disorders into two principal affections, mania and melancholia, to which they added frenzy or fury.

Sometimes mania and melancholia were treated of as distinct diseases; but the best authors, as Aretæus, Cælius Aurelianus, and Alex. Trallianus, bear evidence to their identity, admitting, however, varieties. Aretæus aptly remarks, that there are many kinds of insanity, but only one genus;* and Trallianus coinciding, alleges, that the incipient attack may be mania succeeded by melancholia, and *vice versâ*, or that they may alternate and interchange with each other with the greatest degree of rapidity. Cælius Aurelianus declares, that both affections may be synchronous; and that the precursory symptoms are similar.† Paulus Ægineta seems to entertain the same opinion, nor has he thought fit to treat of them as distinct diseases.‡

Thomas Willis, Morgagni,§ and Boerhaave, especially refer to the affinity of the two affections, and their interchanges, observing also, that it is difficult to pronounce under which a patient labours. Hoffman|| not only refers both mania and melancholia to one species, but alleges that they have one common origin and cause; viz. from an excessive afflux of blood to a weak brain: he maintains, that the only difference is in degree and time of invasion; and that they are not only apt to change one

* De Maniâ, cap. vi.

† Morb. Chron. lib. iii. cap. 6.

‡ De Melanch. &c. lib. iii. cap. 14.

§ Epist. Anat. Méd. viii. No. 1. || Med. Rat. Syst. tom. iv.

into the other, but may exist separately, conjointly, or alternately; in all which he professes to follow Aretæus and Trallianus.

Dissections demonstrate that the morbid appearances in mania and melancholia are the same, and the like in respect to all the varieties recognised; such as monomania, theomania, demonomania, erotomania, suicide, lycanthropia, zoanthropia, panaphobia, nostalgia, &c. No form of insanity is characterised by any peculiar organic change. Such investigations, therefore, oppose all divisions founded on organic causes, though they confirm most satisfactorily the common origin and relationship of every form which presents itself.

Cephalitis, or phrenitis, cannot rank as a species or variety of insanity, and therefore is excluded from consideration.

Mania and melancholia do not preserve that permanency of character which is essential to a genus. I doubt their pretensions even to be considered as distinct species: for it must be acknowledged, that mental derangement assumes, successively and alternately, every possible form; that not only mania and melancholia, but fatuity also, is frequently complicated in the same case. In fact, any one of these mental affections may preserve its peculiar type unaltered for many years, and still be capable of interchanging one with another.

Dr. Haslam justly objects to their being considered as different diseases, and merely countenances the terms mania and melancholia as contradistinguishing the two forms under which insanity commonly appears. He remarks, that the lives of many insane persons are divided “between furious and melancholy paroxysms, and who under both forms retain the same set of ideas.” Not only the mental symptoms, but what is more important, the physical symptoms, in the incipient stages of these two forms, are analogous; that is, furious raving and strong

marks of disordered vascular action and cerebral excitation are common both in mania and melancholia.

Certain animals are affected by a disease or rage, which is commonly called madness; and this rabid state assumes forms very much corresponding with the mania and melancholia of ancient writers. Meynell observes, that in canine madness there are two species: one, raging, in which all the symptoms denote high excitement; the other, in which the animal is dull;* and that these conditions vary, and sometimes interchange. The resemblance between these affections in man and the brute is striking.

Mania has its shades; and nosologists acknowledge a great variety in melancholia. Old Burton declares, that there are eighty-eight degrees of the latter,† thereby implying accordance with the most fertile of nosologists.

From these various considerations I conclude, that mania and melancholia have one common physical origin, and are one and the same disease.

All classification of mental disorders consequently appears to me worse than useless; since it implies that which does not exist — a difference in the corporeal causes of mania and melancholia as marked as in the moral causes and mental characters of the two affections.

Nevertheless, although they approximate more than is generally imagined, a distinction between them should be recognised and preserved; not only for convenience, but because the moral, if not the medical, treatment applicable to the one is not always so to the other.

Demency and idiocy are also other states of the mental functions very important to be contradistinguished; because the former is often a symptomatic affection, and then evanescent; the latter an abolition or annihilation of mind, and permanent.

* Manchester Mem. vol. iv.

† Anat. of Melancholy.

Should the bold but laudable design of the French pathologists, of connecting cause and effect in mental derangement, succeed, then, indeed, we may hope for an arrangement founded on the etiology of the disease,—the only one which can ever be practically useful.

It were fortunate if we could distinguish even the physical causes sufficiently clearly to establish the simple division of structural and functional. We know that either may be consequential to the other; for deranged function will ultimately induce structural or organic derangement, and this again must occasion functional derangement. But we have not yet arrived at this perfection.

The ancients also attempted a practical division of the physical state of insanity into *acute* and *chronic*. These opposite conditions they contradistinguished as *high* and *low*; the first attended by frenzy, or fury, or mania; the second by melancholia. But they carefully distinguished mania and melancholia from frenzy, by noting that the latter was always accompanied by fever.

This division of acute and chronic, or high and low, should, however, be received with the utmost suspicion. The ancients seemed to have used chronic in reference only to duration. The moderns interpret chronic into a passive, and acute into an active state of disease. But the existence of either of these conditions ought never to be relied upon in mental derangement. The frequent and sudden transition of one form to another, alone justifies this precaution.

If acute be interpreted, as it generally is, an active state of insanity, prompting and justifying free depletory measures; or chronic, a settled morbid condition of the brain, in which little or no relief is to be expected,—they both lead to erroneous and dangerous inferences. That they have been both so construed and acted upon

in cases of mental derangement, I have had frequent and lamentable experience.

I prefer the word active to acute, because the symptoms in the incipient and confirmed stages, and in periodical paroxysms, are violent, and because active does not necessarily imply inflammation, and its attendant—depleting or reducing.

If an attack commence with all the characteristics of furious mania, in four-and-twenty hours it may present the opposite; and, on the contrary, a case that has for years borne all the features of what is called the chronic form, will suddenly assume all those of the active. It is easy to judge, that in either case the prognosis must be equally uncertain. It were better, therefore, never to pronounce this an acute, or that a chronic case of insanity, except from the evidence of malformation, or mechanical causes, or after a fair trial of remedies,—but to adopt and persevere in such mode of treatment as a careful view of the symptoms and analogy dictate; nevertheless regarding always, that if death itself do not supervene, the derangement of intellect which we are endeavouring to remove may be changed to another and equally serious form of it, or perhaps be rendered permanent.

Mr. Hill, whose work * contains many good practical observations, preferring the phraseology of Struve and Brown, has adopted *stheny* and *astheny*, as synonymous for mania and melancholia; and under one or the other ranks every form of insanity. This, apparently, is a simple, and, according to the import of those words, an adequate division. But, agreeably to this author's own shewing, the versatility and interchangeability of *stheny* and *astheny* prove that such a division is quite erroneous and untenable.

* Essay on Insanity, 1814.

The late Dr. Robert Willis preferred a singular division of insanity,* which, considered as an extemporaneous opinion, perhaps would have passed into oblivion, had it not recently been revived by his nephew, Dr. Francis Willis.† The former recognised three states of intellectual disorder—*insanity*, *derangement of mind*, and *delirium*, which he thus arranges: “Taking insanity and delirium as two points, I would place derangement of mind somewhere between them.” He describes the difference between insanity and delirium; but derangement of mind, which is thus interposed, he does not describe at all. Dr. F. Willis, however, marks the diagnostic between mental derangement and insanity, by adding, that the former is always accompanied with bodily disease, which “amounts sometimes almost to as much as attends delirium; at other times, it is apparently so trifling as scarcely to be discovered even by those who are conversant with the disorder.” This state he subdivides into the *high* and *low*. In so doing he pretty closely imitates the sthenic and asthenic divisions; and, like Mr. Hill, is obliged to acknowledge, that “every case varies with the constitution; some partaking so much of both states, being neither high nor low, that a person unused to see such *might easily be deceived*.”‡ Now is it not evident, that these divisions of high and low, and sthenic and asthenic, are very dangerous to admit, if other forms may be so united with both, that a person may be easily deceived when called to a case? The same objection which exists to the classing of mania and melancholia as different diseases, obtains here. There are so many shades of each, and these are so perpetually blending, and are so indistinctly marked, as frequently to lead the medical inquirer astray.

* Parl. Report, 1810.

† Treatise on Mental Derangement, 1823.

‡ Suprà cit. p. 41.

Insanity, which is thus considered by Dr. F. Willis as a separate affection from mental derangement, is afterwards rather abruptly treated of by him under the title of *lunacy*. This, also, he divides into two states; the one characterised by violence, the other by lowness and a desire of death; and these, he thinks, correspond with the mania and melancholia of the ancients: but he omits any description of either of them.

The distinctions thus attempted, I fear, are at best calculated to make confusion more confounded, and the treatment of insanity consequently still more unsettled.

Pinel classes mania and melancholia as distinct genera, in which he is followed by Esquirol; and he describes the former as *manie, ou délire général*; and the latter as *mélancolie, ou délire exclusif*. Pinel's distinctions, however, must be viewed with great caution. He refines too much. For instance, he contends that a person may be under the impulse of instinctive maniacal fury, and yet the understanding be sane. This appears to me a paradox; for whenever the passions are so excited as to overpower the judgment, although perception may be correct, yet there must be a lesion of the understanding, or the predominant fury would cease. If delirium consist in a want of correspondence between the judgment and perception, as is described, what else is insanity? If both these faculties act in unison, there is nothing wanting to constitute sanity.

Esquirol confines his division to four species, namely, *mania, monomania, demency, and idiocy*; to which Georget very erroneously, in my humble opinion, adds *stupidity*. The latter, as it is delineated, is in reality that state of imbecility of mind, which, by degrees, degenerates into idiotism, or, what I conceive to be, true mental alienation.

Dr. Alexander Morrison, in his *Outlines of Mental*

Derangement,* has adopted Pinel's synopsis as modified by Esquirol. This is preferable to every other. Still, even here an objection applies. I cannot approve the substituting of the new and compound word *mono-mania* for melancholia; the latter being sufficiently expressive, besides being universally received and understood.

Monomania, as its prefix, *μονος*, *mono*, signifies, is mania with only a single delusion of the mind. Now in true melancholia several delusions may co-exist and rapidly change; but in monomania one only predominates, and persists to the exclusion of every other. This phrase appropriately enough expresses that variety of melancholia not infrequently met with, which exhibits a solitary delusion; and to that sense it should be restricted.

There is, however, in my judgment, a yet stronger objection to *monomania* being introduced in medical language. The phrenologists have adopted it: not in its original sense, expressive of insanity with a solitary delusion; but to express that the different hallucinations are dependent on the deranged function of that particular organ or portion of the encephalon which exercises it. Now, as the delusion stamped on a monomaniac's mind differs in every case, it cannot be the emanation of a distinct organ or portion. Besides, the number of organs represented in the phrenological map of the brain must be limited, while the hallucinations we meet with are in no two cases alike, and are infinite.

Hence, as there is at present great danger, in using the word monomania, of having it applied in one sense when an opposite is meant, I shall prefer and continue melancholia.

Since every species of insanity "runs into, mixes, and blends with each other," all attempts at classification

* Outlines of Lectures, &c. 1826.

founded on symptomatology must be abandoned ; and to proceed on the etiology of this malady when the causes are so obscure, is quite impracticable.

To him who wishes to define and arrange more accurately the phenomena of insanity, I would offer this advice. Let him first divest his mind of all predilections for systems, definitions, and nice distinctions. If he have not an opportunity of obtaining practical experience, he should read attentively, and impress on his memory the physical phenomena described, and their affinities to other diseases of the nervous and vascular systems. He must attentively study, and then contrast the characters of the human countenance as well as those of the mind ; and he will then be able by degrees to detect even those slight shades by which only the limits of sanity and insanity are frequently to be distinguished.

The best rule, however, for every body to observe, when attempting to form a judgment on any particular case of insanity, is to take care and preserve his own faculties clear, and as free from the mysticism of speculative philosophy as from the trammels of nosology.

Entertaining these opinions, I have no system to prefer ; but for the convenience of discussion, as well as for practical purposes, some arrangement must be followed. I think Esquirol's the least objectionable, because the most unpretending and simple. But it is defective ; since it omits delirium and hypochondriasis, which, in my judgment, have better claims to be considered as distinct species than mania and melancholia. It is true, if delirium be received only in its ordinary acceptation as symbolical of intellectual disorder, it does not merit the rank of a distinct malady. But I think that there is ground to consider it as a frequent idiopathic affection, though certainly much more generally as sympathetic, and often as symptomatic. This point, however, I shall discuss more at length when treating on delirium.

The order I shall adopt, therefore, is : —

I. Insanity.

1. Delirium — Delirium tremens.
2. Mania — Puerperal insanity.
3. Melancholia — Suicide.
4. Hypochondriasis.
5. Demency.
6. Idiocy.

COMMENTARY II.

CHARACTER OF INSANITY.

THE ancient Stoics conceived that a wise man might become furious, but could not be insane; and that every foolish or vicious person was morally mad, and not to be distinguished from those actually or physically so, except by the degree of the disorder.

We certainly sometimes meet with those who are not only considered sane, but who possess superior minds, nevertheless entertaining projects so preposterous, and committing themselves so unreasonably, that none can coincide with them.

Some yield to first impressions and their immediate gratification. Others cherish prejudices uncorrected by reason, and thus voluntarily shut out the light of truth. Many good and otherwise sensible people are in these senses morally mad. Others, again, indulge in reveries, talking to themselves, regardless of all around, till they become insane. The danger of insanity, it has been truly said, is perhaps in a ratio with the habit of abstraction. The one is not a necessary consequence of the other, else Newton could not have escaped; yet this malady certainly more frequently attends on those who devote an exclusive and intense application to a solitary object.

These moral madmen constitute, doubtless, a very large class of mankind; but they have not arrived exactly at that point to be considered physically or legally mad. Yet whenever these conditions of the moral faculties

concur, as they sometimes do, very little more is required to convert them into a state of real insanity.

In the common acceptation, that person is insane or mad, or in a delirium, when any single or several faculties, which synthetically constitute the mind, exhibit signs of disordered function.

Whether one or more of the intellectual faculties be deranged, the pathognomonic of every species of insanity is delirium, continued or intermittent, general or partial.

To describe insanity in all its varieties, would not only be difficult, but it would also be a work of supererogation. In every language of the civilised world, and in every system of medicine, descriptions, sufficiently accurate, of all the forms of mental derangement, are to be found. I shall confine myself, therefore, to a very general description of the characters of insanity.

Madness, says Sauvages, is the dream of him who is awake; and really I know nothing that can be compared to the ideas of an insane person but the delusive images of sleeping visions.

This waking dream may consist in an unnatural rapidity of thoughts, or in a morbid association of them with some known or recollected object, or in the substitution of illusions for realities. Sometimes perception is correct, but memory and judgment are defective, or the reverse may obtain.

Sometimes sensation and volition are equally affected: one, or several, of the external senses shall be perfect, and the others changed; and sometimes all are implicated, or the mind and the will may be at variance. Every sensation, thought, or idea, may have place; but have neither order, object, connexion, nor stability. Neither, though they perceive and think, can the insane always connect, compare, or abstract. These must be received as general propositions, but with exceptions. For instance,

the faculty of associating their ideas with words and things, and of applying them to their own situations, so as to combine and execute plans, is sometimes exhibited in a manner most correct and wonderful. Often, the most trivial thing will induce certain ideas, which at their birth are correct; but the judgment being lesed or perverted, the catenation is broken, their application mistaken, and the most wild and incoherent thoughts, expressions, and actions follow.

Hence, impressions may be either strong or weak; the mind in the one case pertinaciously adhering to one illusion, to the exclusion of every other idea; in the other, the delusive impression is so evanescent as to induce us to presume that the memory is impaired; and yet, hereafter the last idea may revive, and recur with vivid force.

Sometimes the attention to internal feelings supersedes that to all external objects, or the reverse; or one faculty may acquire such an excessive acuteness, while the others retain their natural condition, that such a preponderance of the trains of thought and actions connected with the objects of that sense ensues, as constitutes insanity.*

The will, unconnected with sensation, is often solely occupied in voluntary exertion, and is under no control: hence there is no sense of shame or apprehension of consequences, and the muscular powers are intensely exalted, and every action is an irresistible impulse. Such are equally regardless of natural appetites, or of surrounding objects, except those which administer to their designs. To extremes of temperature, hunger, and other privations, they are insensible; and they display immense strength, and exercise it with great perseverance, with little apparent injury to their general health. On the

* Parry, p. 277.

contrary, some are imbued with a morbid sensibility, are extremely susceptible of the variations in temperature or of any privation, and capable of little muscular exertion ; and yet their speech and actions seem independent of volition.

One or several of the exterior senses are usually obtunded, perverted, depraved, or alienated. The sense of hearing usually suffers the first and most. Their fancies “impart to things inanimate a voice,” and whisperings, or loud and strange noises, as of talking, movements of animals, machines, and sometimes ventriloquous sounds, are imagined. The taste and smell are occasionally singularly perverted. The most disgusting matters, even their own ordure, is eaten ; while they will reject with horror the purest and most nutritive food. The sense of touch is often so much impaired, that it does not rectify the errors respecting size, form, or weight of substances.

In mania especially, they are impetuous, irascible, and often malicious : the impressions are many, but generally less strong and more fugacious. In melancholia they are sad and gloomy, and limited to few, or perhaps to one idea or object exclusively — as in monomania, which is most pertinaciously adhered to. The melancholic is less easily roused to anger, except when interruption or opposition be given to his cherished and fixed delusion, and then he is often furious. Sometimes, however, he is subject to rage as well as to great dejection, and equally without occasion.

Some melancholics are so wholly abstracted, that it is quite impossible to discover from them the nature of their hallucination, or any thing in which they ever took an interest. I met with a singular instance of this kind during the last visit I paid the French lunatic institutions. One woman strongly attracted my attention, as the very prototype of abstracted melancholy. Standing by her chair, in which she sat immovable, I was in-

quiring of the physicians the particulars of her case. Suddenly she spat at me, exclaiming, in good English, "Get out! you d—d English rascal!" The attendants were amazed; for though she had been an inmate of the hospital a long while, they had never before heard the sound of her voice, nor suspected that she was a foreigner. She had been found a wanderer, and being then incapable of giving any account of herself, had been sent where I saw her.

A lady, whom I have known for more than twenty years, was attacked with mania, which ended in melancholia. She has never during that period voluntarily spoken, or asked for a single thing. When urged, by withholding what is necessary to her, and she cannot get it otherwise, she will express her desire briefly, if that will suffice, and no more.

Maniacs are often regardless, melancholics sometimes, and the fatuous are generally unconscious, of the calls of nature. In some the sense of feeling is equally obtuse to the pain of severe wounds as to the vicissitudes of temperature.

The majority are as obnoxious to advice as to rebuke, and even to kindness; but no one should entertain these impressions of an insane person, till convinced, by repeated trials, of the real state of his faculties and feelings.

In demency or fatuity there are no passions to be roused, except those which result from animal wants and instincts.

Some have contended, that mania is only a paroxysm of passion prolonged. Esquirol has well observed, that they may as well say that erotomania is excess of love, melancholia only religious zeal or excessive fear, suicide merely a fit of despair, and that every variety of insanity has its primitive type in some passion.

In truth, do we not see persons of irreproachable lives, or who have exercised every moral virtue while

sane, exhibit characters when insane the very reverse? The modest shall become indecent, the chaste libidinous, the sober drunken, the honest knavish, and the most exalted minds debased to thoughts and actions the most revolting to humanity.

True courage degenerates in the insane to mere audacity and cunning. Their pusillanimity is notorious; but their cunning so great, that they dissemble and deceive all but the very experienced. They have all the traits of cowards, — fear, bravado, and suspicion.

From these causes, as much as from their general inability to combine, conspiracies among insane patients are rare in lunatic establishments. Whatever they project is a solitary act, in which they let none participate; or if they impart their scheme to any one, it is from their impatience to execute it, or from exultation at its anticipated success. They are ever desiring change, and are content no where; and hence they seek to escape control. They readily detach themselves from the ties of parents, kindred, friends, and all moral relations. They have no care for the future, but extreme anxiety as to the present. When this irritable and restless disposition is displayed, they require strict watching.

There are others who pass several degrees beyond this state, and evince an entire perversion of the affections. They are averse from all they before most loved; and this is not expressed simply in words and looks, but they would inflict injury upon them, and they take pains to shun them. Full of distrust and suspicion, they are prejudiced against every one. Others, on the contrary, seem to have preserved their affections, or even to have them morbidly increased; but this tenderness possesses none of the traits which pure affection portrays. That confidence, which is at once the proof and charm of sincere love, exists no longer towards those who, before the malady, were the idol of their affections, and directors of their

minds and actions. The melancholic, how much soever he retains of love for his dearest connexions, nevertheless is deaf to their advice and the tenderest devotion, and will never abate a tittle of his obstinacy. Alienation or perversion of affection may be considered a pathognomonic sign of melancholia.

The powers of reflection and ratiocination are usually visibly altered, or quite destroyed, during an access of mania ; although examples are cited where both exist in full energy ; and I have seen instances of these faculties being suddenly restored in the height of the most chimerical fancies, provided an object sufficiently striking interposed to arrest attention. But when the object which suspended the delirium was removed or past, the same train of delusions and consequent behaviour was resumed. However, when interruption to the continuation of morbid ideas can be effected, that interruption ought often to be repeated, since it severs their association, and thus acts as an efficient auxiliary in promoting recovery.

Pinel refers to a variety of insanity which is very common, and which he denominates *folie raisonnante* (reasoning madness) ; it is marked by a propriety of ideas, and a sort of judgment very imposing. The patient can read, write, and reflect, as if he possessed a sound mind ; and yet is at the same time capable of the most outrageous violence, or will tear every thing to pieces that comes in his way ; or his insanity may shew itself simply in general profusion, in dress, and other extravagances. It is this variety of insanity, and power of self-possession, which so often deceives the inexperienced, who do not recollect that sanity or insanity of mind cannot always be detected in conversation, which is often very plausible, and apparently correct. The delirium in this case shews itself in conduct, and not in speech, and is very difficult to discover.

Again, the same author designates another variety, *manie sans délire* (mania without delirium), in which there is no sensible alteration in the functions of the understanding, as perception, judgment, imagination, memory, &c.; but yet there is a blind impulse to acts of violence, or even to sanguinary fury. This state he ascribes to a perversion of the affective functions.

This, in my opinion, is both an absurd and dangerous distinction; it is absurd, because he who can perpetrate such acts, and yet be in possession of all these faculties, is neither in a delirium nor mad; it is dangerous, because any enormity might be committed, and the perpetrator plead this form of insanity, and hold himself irresponsible for his actions.

The moral qualities are sometimes quite debased: the insane will steal or lie without motive or regard of consequences; and they will talk obscenely without a correspondent feeling.

In insanity, the faculties of memory, imagination, or judgment, may be increased or exalted, perverted or depraved, weakened or diminished, suspended or abolished. In the beginning of many acute diseases, also, there is more aptitude, choice, and felicity of expression and perspicuity, than the ordinary capacity of the patient evinced. This increase and exaltation of the natural qualities of the mind, in the commencement of acute disorders, is remarked by ancient authors, and thence it was inferred to be the effect of divine inspiration. It was likewise observed by them, that towards the end of ardent and fatal fevers, the attendant delirium will subside, and the mind exhibit a quickness and sublimity never manifested in health.

Authors abound in histories illustrative of these mental changes. Aretæus* and other ancients, and some of the

* De Furore, cap. xvi.

moderns, go still further; for they affirm that insane persons exhibit spontaneously an intimate knowledge, nay even a proficiency in the abstruse sciences, or in poetry, music, painting, languages, or the mechanical arts, who, previously to their insanity, were unacquainted with the elements of the several acquirements thus displayed. I cannot say I have ever yet discovered an intuitive philosopher, astronomer, or classic, among those whom I have had under my care; but I have certainly met with instances among them where a talent has been elicited or a taste evinced for polite literature, poetry, music, or the arts, which was never before suspected: a disposition to rhythm is common among the most uneducated of the insane. But comparatively with those whose talents are really heightened, or new ones elicited, the number in whom they are deteriorated or suspended is infinitely greater. Still more numerous are those whose natural or acquired qualifications are wholly, or in great part, absorbed by their mental delusions.

One lunatic will conceive that he possesses a musical genius, when he can neither play on any instrument nor knows a note of music; another that he is a poet, without a ray of poetical inspiration or expression; another that he is a great linguist, but speaks only his mother tongue; another that he is a prodigious mechanic, and can raise the globe from its orbit without the fulcrum Archimedes required. Such visionaries are never disconcerted, nor evince shame, when their attempts prove abortive.

Others, again, are visionaries of another cast: one will fancy himself a deity or a potent monarch, or that he is made of glass or butter; but each will properly regard what is due to his rank or his safety: the deity will demand adoration, the monarch profound respect; he who is made of glass will take extraordinary

care to guard his person from injury; and he who is composed of butter will avoid the fire.

Thus it is evident that Locke is right in saying, that madmen do not lose the power of reasoning, but joining together ideas wrongly, they mistake them for truths, and they err as men do who argue right upon wrong principles. If their imagination converts fancies into realities, they make right deductions from them. The difference between madmen and idiots is, that the former put wrong ideas together, and so make wrong propositions, but argue and reason rightly from them; but the latter make very few or no propositions, and reason scarcely at all.* It may be added, that idiots have their external senses, as well as their intellectual faculties, blunted, which is not always the case with madmen. Fatuity or imbecility is an intermediate state of the understanding; the intellects are impaired, but neither deranged nor obliterated.

When the memory decays, the faculties of imagination and judgment, of course, decay also. In some maniacs the memory is wonderfully retentive, and when they recover they have a perfect recollection of all that past during the course of their malady, as well as of the circumstances which preceded it. In others, the period of their insanity is a perfect blank, and their reminiscences are like those of a troubled or a pleasing dream. The mental derangement in the latter case partakes more of the character of febrile or sympathetic delirium; and, upon investigation, it will probably be found that it ought so to have been considered.

The delirium of insanity exhibits here a character distinct from febrile delirium: the patient perceives and distinguishes one object from another; but he will mistake things, and imagine a perfect stranger to be a relation or

* On the Human Understanding, vol. i. chap. 11.

intimate friend, or a particular enemy: he may know that he is in a house, but he will transform it to a palace, or a prison, or that which it is not; his mind may be possessed by one or several hallucinations, which are conversions of ideal objects into realities, or real objects are falsely represented; and this species of delirium may continue for weeks, months, years, and till death.

Fever is spoken of by some modern authors, as Drs. Hallaran, F. Willis, &c., as the accompaniment of mental derangement.

This opinion is contrary to the descriptions of mania and melancholia by the best ancient authorities. I have never seen a case of pure mania or melancholia accompanied by real pyrexia, except when some other acute affection attended, of which the fever was a symptom.

In violent mania, a preternatural heat of the surface and a hurried pulse are very common; but when this heat is general, or there is an accelerated pulse, it is usually the effect of vehement muscular exertion, and the skin is moist. Partial heat, especially about the head and throat, is much more common. From this state of the skin and pulse, actual fever in mania has been inferred. But the pulse is often slow and small when the skin is hot; and if blood be drawn during this supposed state of fever, it will not present any indication of that condition. It should be remembered, that if blood be abstracted immediately after, or during a violent maniacal commotion, it will put on a buffy coat, as blood always does after excessive muscular exertion or exercise; but this must not deceive us into an opinion that real fever therefore exists.

If universal pyrexia, with a quick pulse and thirst, attack an insane person, and persevere, the presence of fever is manifest, and it should be treated as such; but the patient in such case should be attentively examined,—

for it usually, though not always, denotes the approach or presence of some acute disease.

We must not be led astray from this view by the application of the terms *high* and *low*, in reference to insanity. If they are meant to represent the opposite states of fury and depression, they are appropriate; but if intended to designate active and passive or chronic states of insanity, they ought to be rejected.

Where the memory of maniacs has been strong, it sometimes gradually decays, or becomes suddenly defective, and at length is totally obliterated. On the contrary, I have known an alteration of memory the sole harbinger of an attack of mania, though it is oftener the prelude of fatuity. The progress of age, or the vehemence of long-continued maniacal action, may induce the first condition; but when the memory of the insane suddenly fails, and a familiar name or word is frequently forgotten, misplaced, or transposed, it is a sure indication of some lesion of structure, or disease of the cerebral organ itself. This remark applies equally in those cases where no mental derangement had before existed.

Sometimes an exostosis, or tumour formed in the substance of the brain, or even a projecting spiculum irritating the membranes, may be the exciting cause; but oftener the patient has experienced some slight apoplectic or paralytic attack, so slight perhaps as to have escaped observation, whence originates the lesion of memory; and this is very often a precursor to further derangement of mind.

A gentleman,* whose form and constitution were singularly robust, and whose passions at all times appear to have been so extremely violent, as many years before to

* The late Mr. Ely Stott, whose will gave rise to the celebrated cause, *Dew v. Clark*, which was set aside on the novel ground of "partial insanity." The notoriety of this case precludes the otherwise necessity of concealing the name.

have induced a suspicion of his sanity, sustained a slight stroke of paralysis, from which he perfectly recovered, except that his temper appeared more irritable than before ; though it has been contended, that his mind likewise was then injured. When about seventy years of age, he experienced an attack of hemiplegia. He recovered his muscular powers, except of the side affected, which in a degree remained weakened. However, his intellects were now evidently deranged, and his conduct became very ungovernable. I was at this period consulted, in conjunction with the late Dr. Baillie. He remembered persons very well, and always suited his actions to the object he desired. But if a book were placed before him, he would sit as if reading, though it was clear he made no progress ; nor could he tell whether it was reversed or not. If writing materials were given him, and he was desired to write his name, he could not trace a letter, though afterwards he so far improved as to form the letters of his name ; but then he could not connect them, or write any other word. His speech was singularly affected. The first impression on the sensorium was correct ; and the common greetings on meeting or quitting persons he pronounced correctly. An exclamation or oath was uttered quite distinctly ; and the two or three first words of any sentence he meditated and commenced were clearly and appropriately spoken. But whenever he had pronounced these few words, he always added, *Glory ! glory ! — glorious ! glorious !* These words he would continue to repeat till he supposed he had finished what he meant to say, and then manifested great anger because he was not understood.

He lived about a year afterwards, and died of dropsy. His memory of persons and things to the last was correct ; but he could not recollect words to represent his ideas.

The exterior of insane people is often singularly

changed, especially the skin, which is commonly dry, almost always loses its freshness, and feels loose or detached, particularly about the pericranium: the complexion in maniacs is often brown, in melancholics leaden or sallow.

The person commonly is much attenuated; but the shrinking of muscles in the insane is not always from extenuation by disease or want of nourishment. In some it proceeds from the disuse of their limbs, or from being deprived of the means of exercise; in others, from inveterate indolence, and dislike to move.

There is sometimes a loss of appetite or distaste for aliments; sometimes voracity and great perversion of taste, accompanied by thirst. The tongue is covered with a white or yellowish coat, and so likewise are often the teeth; the breath is hot or offensive; the pulse in general is strong and quick, occasionally hard and full. If the menses, lochia, secretion of milk, &c., have not been suppressed preceding an attack of insanity, they usually cease during the period of excitation.

Lunatics are usually costive; but this is often more the effect of indolence or disregard of natural calls, than from torpor of the intestinal canal. An opposite impression has induced the exhibition of violent cathartics in almost all cases, and often to the great distress and injury of the patient.

Generally, the insane are unconscious of their condition, though they are singularly acute in discovering it in another; and are commonly ready enough to point it out, and assist in any plan to counteract or repress their companions' mad vagaries.

Sometimes, however, patients are met with who are perfectly conscious of their condition, but are most artful in concealing it. Others confess and lament it feelingly, and yet cannot repress the propensity to make irrational

proposals, or do any ridiculous thing, or commit suicide or other kind of violence.

A lady, of good family and of most amiable character, aged forty-eight, with an hereditary predisposition, and who had been insane about twenty-five years before, became a good deal affected from a younger sister having suddenly manifested insanity. Shortly it was necessary to confine the elder to her room for the same cause. In a few days the younger sister, for want of due precaution, destroyed herself. The fact was concealed from the elder sister; but she likewise betrayed a suicidal propensity. She confessed the feeling, and reasoned upon it as an aberration of her mind, and as sinful, and entreated not to be trusted. In fact she made many attempts on her life. She had many other delusions,—one of which was, that another woman was within her, and prompted her insane ideas and actions. At times she was highly excited, and would dance on the tables and chairs, tear her linen, and bite those about her, if permitted; and from her language a slight degree of nymphomania might be suspected. It was quite distressing to hear the occasional expression of her deep sorrow, that she was unable to control her impious and immoral feelings, and extravagant actions.

Such cases demand the greatest care, and the kindest consideration.

Lunatics are often possessed with an extraordinary dread of witchcraft, or of supernatural beings or demons, and will fancy themselves under their baneful influence. Hence this state of delusion has been designated *demonomania*. In these enlightened times, this species of hallucination is more rare.

In some despotic countries the timid and credulous stand more in awe of the machinations of the police than of demons; and this impression, in some places, has

actually superseded the more ancient apprehension respecting supernatural agency.

Physical love, also, has been constituted a distinct species of insanity, and designated *erotomania*.

It cannot be denied, that the sexual system is sometimes under great excitation when the cerebral functions are morbidly affected. But it then appears to me to be a morbid action emanating from, and connected with, cerebral irritation. This action may excite the genital system by sympathy, and be reciprocally maintained. Whenever symptoms of sexual irritation occur, they render the case more complicated. These cases inflict great distress on the relations of the patient. Having, perhaps, a perfect knowledge of the character and chastity of the unhappy individual so affected, all are horror-struck at the supposed change of moral feelings. But they should console themselves with the reflection, that although reason controls all our passions, yet when the former is disturbed or alienated, the animal propensities which are implanted in us all, will predominate; and still the purity of the sane mind be unpolluted. The nobler feelings, which are grafted on principle, and cultivated by education and example, are then supplanted by the baser. But they are in abeyance only, and will return with the senses.

Physical love, when under the dominion of reason, is both a natural and moral passion. But in some it is more powerful than in others; and even in a virtuous person, when unrequited and hopeless, may subvert the mind.

Authors are apt to speak of love in relation to insanity in a moral sense, when in fact they mean mere physical love, or lust. Many cases are related of chaste persons stimulated by natural desire, and repressing its criminal indulgence, becoming insane. Stahl, Zimmerman, Frank, &c., have quoted such examples. Galen says, that those who abstain from such gratification generally grow dull

and languid, depressed in spirits and melancholy, and eventually lose their appetite and power of digestion.*

Whether the manners of other countries admit of greater freedom of communicating their secret desires, or whether a more moral education has taught greater self-control, I cannot explain; but if we may judge from the rarity of them in practice, such cases are comparatively rare in England. Foreigners themselves ascribe much to the influence of moral instruction, and from that source the superior modesty and reserve of English women. Great laxity of morals will encourage great indulgence in sensual pleasures; and when once the barriers of female modesty are violated, a confession of the feelings which urge to gratification is little regarded.

Pinel gives these afflicting propensities the characters of a real disease in France. He says, it developes itself, “*D’abord gaîté insignifiante, regard animé, recherche voluptueuse dans la toilette, curiosité inquiète, tremblement des mains, douleurs sourdes à la matrice, chaleur brûlante dans l’intérieur des seins, mobilité extrême des yeux, impatience; l’accès est alors à son plus haut degré; babil rempli de mots sales et de propos obscènes, vociferations, gestes provocateurs, et mouvemens du corps les plus lascifs, tous les emportemens effrénés, et les illusions d’un délire érotique.*”

This impetuous passion, he adds, will yield to proper restraint; and a sullen repose, or rather a state of lassitude, succeeds. Extreme emaciation supervenes, and stupor and fatuity. Health and strength return by slow degrees.

This affection sometimes becomes periodical; and life is then passed alternately between erotic aberration and the most stupid apathy.

Local irritation will excite wanton feelings in either sex, however naturally virtuous and chaste, and, once

* *De Locis et Affectibus*, lib. iv. cap. 6.

super-excited, proceed to revolting extremes. Hence satyriasis in men, and nymphomania in women. This irritation may arise from prurigo attacking the genital organs, pediculi, and various extraneous causes; but determination of blood to those parts is the most frequent local cause.

Esquirol mentions two cases of nymphomania in which he discovered an ulcer in the neck of the uterus; thereby inferring this was the cause of the affection. But there is reason to doubt whether ulcers so situated would produce any such effect; since the uterus, many physiologists believe, is not the seat of sexual passion. Hence the terms *metromania* and *furor uterinus* are solecisms in medical nomenclature.

Obscene language or gestures during maniacal paroxysms, must not, as a general rule, be interpreted as indicative either of a depraved mind or of highly excited sexual feelings. We may as well ascribe impiety to a madman, because he utters blasphemies. Man without reason is an automaton, and, like a machine, is destitute of motives. His ideas wander; and he speaks of things, and commits acts, without reference to the particular function which governs them. Chaste people, when insane, therefore, may be betrayed into obscenities, and religious ones into blasphemies, which neither accord with, nor represent, the real state of their physical feelings or moral sentiments: there is then no connexion existing between the mind and expression.

In men the symptoms of this revolting condition are evident enough; but when modest and delicate females are thus affected, which they occasionally are, before derangement is complete, and the sense of female delicacy lost, they suffer greatly in silence, though their actions often betray the case to their own sex.

A young lady, aged 15, of hereditary predisposition to insanity, of good family and fortune, and who had been

most virtuously educated, manifested symptoms of insanity. Her person and mental faculties, which were of the highest order, were fully developed at the age of 11, when the catamenia first appeared. She was of a violent and haughty temper; her memory was remarkably strong; but devotion to a great variety of studies had tried her mental powers too much, and deranged her general health. The menses became obstructed; there was great irregularity in the circulation; the extremities were always of marble coldness, though the season was warm; at the same time, the heat of the head far exceeded what I ever before remarked in any case. Every means were prescribed to equalise the circulation. At length symptoms of nymphomania were manifested; but unaccompanied by any indecency either in language or looks. Nor would her medical attendants have suspected it, had not the nurse mentioned it. The affection, however, was not permanent, but plainly intermitted.

In this case a distinct sympathy with cerebral irritation was exhibited; for when the determination to the head was marked by the preternatural heat of the scalp and coldness of the extremities, the genital irritation ceased; and when the head was cool, the irritation returned, as if transferred by metastasis. Local abstractions of blood from the head when hot, and refrigeration of the shaven scalp; or any application restoring warmth to the extremities, as pediluvia of mustard infusion, or strong walking exercise, always relieved the cerebral excitation, and removed the other distressing symptom. As the equilibrium of the circulation was restored, her general health improved, and the catamenia returned. The local irritation then disappeared, and in about four months she quite recovered.

These cases are more rare, I think, among the male than the female sex. Happily, they are not frequent in either. When the patient is chaste, and the symptoms

are the effect of cerebral irritation, or of local determination, they generally soon subside. But if the patient have been accustomed to sensual indulgencies of this kind, the cure is more difficult.

In all cases of insanity where the erotic passion is displayed in a violent degree, and there is no evident local stimulus, the cause should be sought in the brain, the seat of the original irritation, which acts sympathetically on the generative apparatus. Remedies tending to diminish the morbid action of the part primitively affected, will often remove this symptom ; but when applied only to the parts secondarily so, will be often unavailing ; although local applications of the same kind may sometimes be usefully applied both to the one and the other part.

Gratification never cured satyriasis or nymphomania : a fact which fully proves how different is the source of this morbid feeling and natural desire. Hence it may be judged what terrible consequences must follow from mistaking a case of this kind. How deeply would the error be deplored, if a modest and chaste female, though deprived of reason, and influenced by a morbid excitation, were treated as if influenced by a depraved and lascivious passion. Undoubtedly, the temperament of many constitutions is more disposed to venereal pleasures than others ; and the inclination may be so powerful, as scarcely to be checked by the force of steady and virtuous principles ; and in some it is periodical, and amounts to a species of erotomania. When this can be ascertained, marriage may be a preventive of mental derangement, and is the only remedy.

Under the impression that violent sexual irritation is a cause of insanity, castration has been advised as a remedy. But how many afflicting instances are there of self-emasculation, and yet the mental delusion which impelled it has remained the same ! Besides, insanity may take place for the first time, or be prolonged to

decrepitude, even after the venereal æstus has ceased, and the organs of generation have lost their activity.

Insanity may be continued, remit, or intermit, but it observes under no form a regular crisis. Nature, however, sometimes seems to make an effort, as it were, to throw off the influential cause; for we often find, that the formation and discharge of an abcess, especially of scrofulous glands, the appearance of a cutaneous eruption, a fit of gout, or an hydropic effusion, will terminate long-continued mental derangement.

Mania frequently exhibits this periodicity; melancholia more rarely.

At first the remissions are irregular: once in the twenty-four hours, if at all, and usually in the day-time the paroxysm declines, and there is an exacerbation in the evening. The intermittent form admits of considerable intervals, during which perfect sanity may exist. These intervals are designated *lucid*. It is this form which has been absurdly supposed to be influenced by the planetary system.

Some contend that there is no such thing in insanity as a lucid interval; that is, a person must be sane or insane. This is the *reductio ad absurdum*; for who, accustomed to insane people, will deny that intervals of sanity do occur, and that during such period a person is in full possession of his faculties. This interval may be of so short duration as a few hours, or a day or more; and yet as the paroxysm uniformly returns, it is obviously the continuation of the same morbid action. Do we not admit that fevers have perfect intermissions? But do we pronounce the patient, therefore, freed from his fever?

Thomas Willis describes a lucid interval as a perfect return of a sound mind during the intermission, or so long as the mania ceases.* And this, in my opinion, is an accurate definition.

* Pars Pathol. ii. cap. 12.

Many other phenomena present themselves, and mark the physical and moral characters of disordered intellect, which are too well known to require notice.

There are a few, however, which demand particular attention. These are — 1. *Physiognomy*; 2. *Position*; 3. *Sensation*; 4. *Muscular Powers*; 5. *Fasting*; 6. *Odour*.

1. *Physiognomy*.—All mankind, and even many animals, are more or less physiognomists; for all attempt to read in the features of the face the workings of the mind. Strong emotions are there correspondently depicted. But some persons acquire such a command over their feelings, that they can suppress them so as to conceal the mental impression.

In deriving inferences from the physiognomy of the human countenance, we judge from our intercourse with intellectual beings, whose minds are influenced and guided by ordinary perceptions, and the reasonings of a sane understanding. Nevertheless, however well qualified by education or natural penetration to develop the inward man, we are frequently led into very erroneous conclusions on human character, motives, and actions, by the outward man.

If it be difficult to judge, from the expression of a sane person's features, the impressions made on the mind under ordinary circumstances, how much more so must it be to form a correct judgment from his whose aim is to deceive, whose mind is regulated by no rule, and whose ideas and actions are equally wild and incoherent, and perhaps as fleeting as the clouds? Here the countenance presents a new and often totally opposite aspect, and the original character is in every particular changed.

It is not the character imprinted by nature, or that which results from the artificial state of society, which is perceptible, but one which perhaps outrages nature, and renounces every social trait. Each feature assumes a new expression. The trace of every noble sentiment,

probably, is banished, and supplanted by all that is derogatory to the nature of man.

The feature which undergoes the most singular and striking change is the eye. The pencil or graver may portray, with tolerable fidelity, the contour of the countenance in the varied states of maniacal fury, melancholy, fatuity, or idiotism; but the skill of art is vain in delineating the peculiarities in the eye of the lunatic. The pen is equally, or perhaps more, incapable of describing it. Now red and fierce, then audacious, threatening, steady, or mobile; sometimes brilliant, quick, and flashing fire; or dull, desponding, fixed, and vacant; and in most cases presenting a remarkable glassy or shining appearance.

Nothing but intimate and frequent communication can impress the living picture on the recollection; and there is no knowledge so essential as this is for guiding the judgment in the examination of a person suspected to be insane, or in the management of those who really are so. Their language and behaviour may deceive; but the experienced can scarcely be mistaken, if a careful regard be paid to the expression of the eye. The mobility of feature may be as rapid as the imagination is vivid; but when every feature shall vary, or be kept under control and be steady, the eye may still indicate the erring thought.

Every malign propensity especially has its appropriate expression in the eye of the maniac. Cunning, suspicion, and fear, are always forcibly depicted. But, above all, I think the propensity to suicide is the most strongly marked. The look in that case can scarcely be mistaken by the practised observer. But, unfortunately, too often, when first this propensity is manifested, the patient is observed only by the inexperienced of his own family or friends, and the fatal deed is done ere any alteration is perceived and the disposition suspected.

This organ is not only the index of the mental impression in cases of insanity, but also of the condition of the brain in various other cerebral affections; for there is an expression peculiar to most of them. Thus, the phrenitic, hydrocephalic, apoplectic, and epileptic, as well as the maniacal diathesis, have an appropriate eye; so likewise has a state of inebriation. In some of these affections the eye varies with the different stages of the malady; but in mania, it varies and roams correspondently with the impression on the sensorium.

Sometimes the pupil will be dilated to an extreme, and the patient will bear, without blinking, the direct rays of a vertical sun; sometimes the pupil is concentrated to a pin's point, and light is a source of extreme irritation. The eye is frequently much protruded in mania; but this is not owing to extreme pain, as in phrenitis, or to greater activity or fulness of the blood-vessels, as may be suspected in hydrocephalus or apoplexy. During the maniacal paroxysm, as when horror-struck, the eyelids are forcibly separated and retracted, so as to expose a circle of the surrounding albugineous substance, which gives a greater appearance of prominence to the orb than is really the case. Sometimes the eye-lids recede, from absorption of the adipose supporting the eye-ball, and general emaciation of the face, as is seen in persons after extenuating illness; and then also the eye looks enlarged and protuberant.

Many persons predisposed to violent mania have the iris so black, that it can scarcely be distinguished from the pupil; the demarcation of the circle is indistinct, and blends more with the white substance than when the iris is of another colour; the white, therefore, is not so clear, but is muddy, and the fine vessels on its surface are visibly injected with blood. The melancholic have generally blue or gray eyes. Little regard, however,

is to be paid to the colour of the eyes as peculiar to either form of insanity.

The study of physiognomy is more essential in mental derangement, perhaps, than in almost any disease. It not only guides us in doubtful cases, and instructs us to ascertain a predisposition to hereditary insanity, but also warns us of its approach. Esquirol has given graphic sketches of the principal forms of insanity. Dr. Morrison, likewise, has several excellent portraits in his *Outlines of Mental Diseases*; but no effect of the graver can equal the natural expression.

2. *Position*.—Position frequently points out the seat of a disease or pain in insane persons, when we can obtain no other indication. To fix with precision on the exact spot where sensation is produced, is always the result of judgment, deduced from the concurrence of several senses. Maniacs and young children are often incapable of locating the actual seat of pain, and it can only be discovered by external signs, especially by their attitudes. They often say pain is in one part, but apply the hand to another. Therefore the action only, and not the words, is to be relied on as the true index of its site. Consequently, the insane should be carefully watched in repose as well as awake, and in the exercise of their ordinary occupations, in order to detect what they cannot explain, and which it is essential should be known.

Among the prognostics, therefore, the most unerring is attitude: ease and freedom of position, lying on either side, and breathing soft and regular, denote health; supination denotes great prostration of strength; lying on the belly is a sign of pain in that part, and is often a prelude to delirium. Many lunatics are observed to rub or press their heads with their hands, and if asked, will acknowledge that they feel pain there.

Maniacs particularly, and some melancholics, have a decided partiality to be sitting, when they are not suffered to be at large. Some sit crouching with their knees folded towards their chins. Many have a positive horror at a recumbent posture; and it is prudent to attend to this predilection, for it often proceeds from a tacit consciousness that a horizontal position induces too great a flow of blood to the brain. As a general rule, it is best to take care that all insane persons sleep with the head raised, as well as cool.

Some obstinately adhere to standing erect. These sometimes are fond of leaning their heads against a wall, which position I believe is induced from the adventitious relief which the contact of the head with a cold substance affords. Wiseman mentions one who for months sat upright against a wall, without speaking or opening his eyes. On dissection, a large quantity of water was found in his cranium.

Again, some certainly prefer lying with their heads lower even than their bodies. A furious female I saw in Bedlam a few years ago, preferred kneeling down, and keeping her head in contact with the ground. But in this case, I remarked, that she placed it over the grating of the drain in her cell, as if she experienced relief from a draft of cold air pouring on the scalp.

Indeed, maniacs often delight in exposing themselves to a cooling air and falling showers of rain.

The maniac sometimes assumes a fixed position, directing his eyes towards the heavens with a steadfast look, as if lost in adoration. He is aroused as from profound meditation, speaking in a low voice as if fearful to make a noise, or he suddenly breaks into vociferous cries; he walks about rapidly, and stops by turns with an air of admiration, or with a sort of profound recollection. Sometimes he manifests a jovial humour, and bursts into immoderate laughter at his own conceits.

On the contrary, others are immovable, fall into imperturbable silence, with averted eyes, involuntarily shed tears, and anguish and sorrow seem concentrated; or they look stupid and void of all expression.

Such movements and actions are the offspring of a creative and bewildered imagination, and are not to be regarded as indications of peculiar corporeal feelings.

3. *Sensation*.—Some authors, and Darwin among them, have supposed insanity to be a disease of pain; and hence the cries, screams, moans, howls, and vociferations of the insane, have been ascribed to the bodily agony they suffer. We must not, however, imagine that these are indications of bodily suffering, any more than that they really feel pain in the various remote parts to which maniacs often refer. When cephalalgia is complained of, it is generally as a precursory symptom, or in the incipient stage of insanity; but the existence of it is never expressed by cries, &c. Severe pains have been felt in the stomach, intestines, and other organs, previously to a maniacal paroxysm; but when the delirium of insanity is developed, the morbid action of the remote part being transferred to the brain, the organ originally affected is commonly relieved from suffering.

The countenance of those who are thus noisy often expresses mental anguish, rarely bodily pain. Sometimes, however, the features and movements accord, and then the existence of bodily pain may be suspected, although not described in words.

Emaciation is alleged erroneously as a proof of long suffering; but this arises often from functional derangement of the digestive organs and intestinal tube, by which the powers of digestion and assimilation are so depraved, that the system derives, comparatively to the ingesta, very little nutriment. Very frequently, too, the caprices of insane persons prevent their taking a regular supply of food; and hence extenuation of body.

As the memory of some lunatics retains upon recovery a perfect recollection of all that occurred during the derangement of their mental faculties, we might suppose that their evidence would set at rest the question, whether, during the violence of the maniacal action, they felt acute pain or not. I have never, however, obtained from any convalescent a direct avowal of his having experienced violent pain, though when recovering, slight and transient pains, chiefly in the head, are often complained of.

In incipient mania, positive acute pain is often felt. So in the commencement of apoplectic and convulsive affections there is, doubtless, intense pain. The sensorium is affected both in mania and comatose affections, when fully established in different degrees: in mania, sensibility is perverted, depraved, or impaired; but in comatose affections it is absolutely suspended. In the one case, if pain exist, we might learn it indirectly from some external sign; in the other, we can expect no direct proof of it.

The convalescent usually complains of a great weight or fulness, or dull pain in the head, and some confusion or weakness of the intellectual faculties; but as the latter strengthen, the other symptoms subside. It is doubtful, whether the sensation produced by coming to a knowledge of his late condition, or remembrance of the moral causes which induced it, do not originate these distressing symptoms; or, whether they are not the necessary sequelæ of corporeal pain sustained during the continuance of the maniacal action.

It is asserted, that maniacs experience a violent internal heat, especially in the abdomen, and that the efficacy of cooling drinks, &c., in relieving it, is an unequivocal proof of its existence. Sometimes they will complain of partial heats in the hypochondriac and abdominal regions, as nervous people do in various parts of the body. This feeling, however, is generally imaginary; and therefore, drinking of any fluids will never

allay it. Many will indulge in cold drink to excess, if they can get it. But this inclination is most common in the early stages of insanity, and among great talkers and those who vociferate, and especially when any gastric affection attends. Thirst of drink frequently becomes a habit rather than a real want.

Excessive thirst, whether from habit, or from diminished secretion of the salivary and mucous glands, is much more rare among the superior classes than among poor lunatics. The sensation is oftener perhaps that of a dry, parching mouth, more than thirst; and hence the fondness of common lunatics for chewing tobacco and smoking.

Probably, this notion of maniacs feeling great internal heat may partly have originated in the error, that they are particularly insusceptible to extreme cold. There is no mistake which has inflicted such incalculable evils upon the inmates of lunatic asylums. So far from its being true, they are generally remarkably obnoxious to either extreme of temperature. Instances of corporeal insensibility do sometimes occur, and so likewise do instances of singular insensibility to wounds, pain, and privations of all kinds. But these must not be converted into general principles; for in such case, not only would the patients suffer much discomfort, but real mischief.

Intense cold, it is well known, will affect the mental faculties in a remarkable manner, when the corporeal functions have comparatively suffered less. Capt. Parry relates, that during his voyage of discovery, two young gentlemen, when first they returned on board ship after exposure to intense cold, looked wild, spoke thick and indistinctly, and it was impossible to draw from them a rational answer: the mental powers appeared gradually to revive with the returning circulation; till then, they had the appearance as if they had been drinking too freely.

In many maniacs the nervous power seems to be con-

centrated in the brain, and the exterior is almost deprived of sensibility; and hence it is that they are often regardless of pain, extremes of temperature, &c.

Even Morgagni supposed that mad persons bore cold with impunity, and inferred that two women could not have been insane, because one was attacked with a sore throat, and the other with inflammation of the thorax, when the weather was very cold.*

During the period of excitation in mania, or of alternate excitation and abstraction in melancholia, the sentient principle is generally very obtuse, and often entirely suspended. In fatuity it is not only blunted, but debased. In idiocy it never, or only partially, exists. In this condition the insane are not simply insensible to the action of external impressions, such as extremes of temperature, but also of the most caustic substances taken internally, as well as of desperate wounds, hunger, &c.

Pressure on the brain, we know, will suspend or blunt all the animal and mental functions, according to the degree of compression and the manner of applying it. An extraordinary flow of blood to the brain, if not in excess, will invigorate the nervous system, and add fresh energy to the muscular powers. But neither is the obtuseness of sensation in the insane the effect of pressure on the brain, nor is the augmented muscular force which they often exert always the effect of additional impulse given to the brain, from an increased flow of blood to that organ.

It is easy to conceive, that intense abstraction may render a monomaniac insensible to cold and various privations; but it is not conceivable, how wounds, burns, and the most painful operations, can be borne, as they frequently are, by the insane, who differ too in natural

* Epist. viii. art. 7.

temperament, and who are vividly alive to every surrounding object.

A gentleman, aged thirty-six, insane, with a strong hereditary predisposition to suicide, contrived, during the temporary absence of his keeper, though his legs were fastened together, to kick a hole in the fire-guard, and thrust his feet into a quick fire, which he made more fierce by tearing up a book, and thrusting the leaves in. He was found a few minutes after, sitting very composedly in this position. His toes, and part of one foot, were severely burnt; the other escaped with a smart scorching. In the burnt foot, inflammation, extensive and deep eschars, and mortification, with sloughing of the muscles and tendons, followed; and, finally, all the bones of the toes, and some of the metatarsal bones, sloughed away. The cure of this foot occupied more than a year; the scorched one soon got well. But neither during the combustion of the toes, nor for months afterwards, upon removing the diseased parts, or dressing the wound, was any pain expressed. But when the mind improved, and the desire of suicide diminished, which it did long before the wound healed, he complained violently of the pain he suffered from it, or when it was dressed.

A French dragoon became insane from a *coup de soleil* during the Spanish campaign. In his delirium he found means to get at a vessel on the fire filled with boiling water, of which he drank, at a draught, about a pint, and then quietly returned to his bed. He remained two days without eating or drinking, and without complaint, though his mouth was much inflamed and eschars had formed. Six days after this circumstance, an abundant ptyalism came on, which was succeeded by a copious diarrhœa; and in three or four days afterwards he recovered his health and intellects.

Many voluntarily impose wounds or mutilate themselves, not for the purpose of suicide, but as a punishment

on themselves for their evil passions, or in expiation of imaginary crimes, and without evincing sense of pain so long as the delirium lasts.

A Venetian shoemaker, in a fit of religious enthusiasm, emasculated himself, from the effects of which he with difficulty recovered. Afterwards he chose to imitate the crucifixion of the Saviour. He first made a large wound in his side, and stretched his body, and attached it to a cross by nails driven through his feet and hands, and thus suspended himself in the front of his house. He was taken down and removed to the hospital, where ultimately he was cured of his wounds, but not of his insanity. The surgeon, Cæsar Ruggiéri, who attended him and published his case, reported, that in his lucid intervals he suffered cruelly from the agony of his wounds; but during the exaltation of his delirium he appeared to feel no pain.

Such instances of suspension of the sensorial powers and insusceptibility to pain, are ascribed by Hippocrates to the condition of the mind.* But this state lasts no longer than the disorder of the intellectual faculties. With the remission of the maniacal action, the tone of the sensorium improves; and when that action wholly ceases, sensibility is corrected and restored.

The temperature of limbs deprived of a due degree of nervous influence, as in partial palsy, is always lower than natural. From analogy, therefore, we may infer, that in those cases where the senses are not absorbed by an exclusive object, and yet the maniac is insensible to cold, that it arises from defect of influence in the extremities of the nerves supplying the cutis.

To this insensibility to bodily pain often succeeds extreme susceptibility, both to physical and moral im-

* *Quicumque aliquâ corporis parte dolentes dolorem ferè non sentiunt, his mens ægrotat.*

pressions. We should be ever mindful of the possibility of this change or re-action, which is sometimes very sudden; otherwise irreparable mischief may ensue, either to the corporeal or mental health of the patient, and perhaps to both.

4. *Muscular Powers*.—The muscular force exerted by insane people is truly marvellous, and often immensely disproportionate to their form and their natural powers. This is the result of violent excitation of the sensorium. The most delicate women during the hysteric passion will make powerful efforts; but in a paroxysm of mania the force exerted is still greater.

The most muscular and robust are commonly the least sensible to external impressions. The ancient *athletæ* were examples of this constitution: Hercules, their archetype, was more famed for his vast strength and brutal courage than for feeling and genius. The epileptic and stupid often experience a great increase of muscular power. Persons of a quick imagination are generally very sensitive, and of more delicate fibre; but when from any cause they are insane, and insensible to exterior impressions, they then especially are capable of exerting a most extraordinary muscular force. The degree of energy seems to augment as sensation diminishes or becomes more blunted; and hence some have imagined that the strength of maniacs is in an inverse ratio with sensibility.

The faculty of feeling has limits which cannot be overstepped with impunity. Anger imparts astonishing force to the muscular powers. Therefore Bichât says madness is anger concentrated, and that this passion exactly displays the influence of organic life over animal life.

A paroxysm of furious mania may be incited by a false perception or recollection. In this state of exasperation, the muscular powers are augmented to an

extreme degree. But the excitation producing this prodigious power, be it from what cause it may, when it ceases, is always succeeded by a decline of the physical and moral powers. In mania the state of exaltation may continue some minutes or several hours; and sometimes it is renewed so frequently that it may be said to be almost permanent.

The more this intense excitation is prolonged, the more exhausted will the sentient power be when it ceases. The countenance assumes then a death-like hue, the utmost feebleness, and sometimes a tremor of the muscles is observed, and death itself may follow.

In true mania, fury has neither cause nor object. Where the mind is occupied with an exclusive idea, as in monomania, the recurrence of fury proceeds from that idea acting with greater intensity. The idiot has also paroxysms of fury; but they more resemble fits of violent anger, provoked by opposition. They are the mere impulses of animal feeling.

In chronic fatuity they are generally indifferent to every thing, and insusceptible of this degree of stimulation.

The astonishing muscular power exercised by the insane is often mistaken for proof of real strength; and hence a depleting practice is often adopted, fatally injurious to the patient. The fury which prompts this violent exertion may be abated, or even subdued, by these means. But it should ever be remembered, that a state of exhaustion naturally follows these paroxysms; and then the vital power, which the depletory measures have subtracted, may be wanted to prevent worse consequences.

The state of abstraction wonderfully increases the muscular and locomotive powers. I saw an insane officer in the Military Lunatic Asylum at Rochester, who was represented to me to be always walking, as long as the

regulations of the place permitted, on one particular spot. He never spoke voluntarily to any one, and his sole occupation, besides walking to and fro, was rubbing his hands together, on which he always wore gloves, or rather the remnants of gloves. He had continued in this state several years. The exercise he took in walking was beyond any natural powers.

About a year afterwards, on visiting that asylum again, I met him on the same spot, walking and rubbing his hands; but he looked better; and on my accosting him, I was surprised to receive a civil and rational answer. Upon inquiring into the cause of this improvement, I learnt he had been submitted a few times to the operation of the rotatory chair. He always expressed much alarm at the motion; and it broke, in a great degree, his habit of abstraction, and from that time his improvement was visible.

A lady with a strong hereditary predisposition, aged about forty-six, imagined that a tooth, which was removed by a dentist in Edinburgh, had slipped from the operator's fingers, and stuck in her œsophagus. This impression so possessed her, that upon this point she became quite insane; and in a short time various other delusions arose respecting her personal form and functions, equally absurd. Absorbed by this sole idea, she became totally regardless of her person and all decorum; and although she ate and drank heartily, yet she insisted, on account of the impediment in her throat and distortion of her mouth, that she could not swallow a morsel. Except when stopped by natural wants, she paced round her room incessantly during the whole day, and so would have continued during the night, if permitted. She would have even persevered when her feet were excoriated, unconscious of pain.

Patients like these, though their locomotive powers should appear to be the result of real strength, would suffer

as much from a depletory practice as maniacs in a more quiet state. Hence it is obvious, that the muscular force and exertions of the insane must never be received as proofs of augmented vital power. On the contrary, such exertions as suddenly subside as they are produced, and often leave the patient in a state of complete prostration, and sometimes moribund.

5. *Fasting*.—The insane have been supposed to sustain fasting with less injury to the system than if they were sane. This is equally as erroneous as the impression, that they are less susceptible to the vicissitudes of temperature, or that they possess a greater degree of vital power than others.

When absorbed by a solitary delusion, individuals sometimes certainly evince equal indifference to natural and artificial wants. The abstaining from food may, however, proceed from some fixed determination to suicide, or from some religious or fanatical resolve to emulate martyrdom by fasting, or from dread of poison. No matter what prompts the resisting of nutriment, the constitution must feel the effects, and a state of inanition and marasmus follows, which, if the resolution of fasting be not overcome, naturally ends in death.

The vital powers, I have observed, are never augmented by insanity. So far from it, there is no doubt that they are diminished by the extraordinary expenditure of sensorial power which a state of mental derangement always produces.

It results, therefore, that the means of adequately supporting the system should never be neglected; and where the functions of digestion and assimilation are weak, the nutriment should be adapted to such a condition of the digestive organs.

Deprivation of sufficient nutritive food of itself always exasperates chronic cases of insanity. Pinel feelingly describes the aggravated evils of the insane in the Bicêtre

at Paris, at the commencement of the French Revolution, when a necessary supply of food was not allowed, and their ameliorated condition in 1792, when it was greatly increased and improved. The mortality among them in the first period was more than a moiety; in the latter an eighth only.

Nothing is more common than for the insane to object to food from an apprehension of poison in it; but it must not be always considered as a delusion when they refuse it on that ground; for sometimes their taste is so perverted or depraved, that all substances partake of the same flavour, and often a very nauseous one. We must, therefore, if possible, ascertain whether the rejection proceed from indifference, religious scruples, a determination to starve themselves, fear of poison, or real distaste; because the mode of acting must accordingly vary.

6. *Odour*.—The odour of perspirable matter is often very strong and peculiar; and in some adults it is very offensive. There is also an effluvium peculiar to infants.

Dogs are known to recognise their master among a crowd, or trace him a great distance, by his particular odour; and thence we may suppose that every healthy person emits a different one, though not perceptible to our obtuser senses. Humboldt remarks, that the difference of odour is so striking in some climates, that the Indians of Peru can distinguish by it, even in the night, a European, an American Indian, or a negro, from each other.*

Many diseases are distinguished by a particular fœtor, as hydrocephalus, rheumatism, and gout; the pelagra is distinguished by a smell like mouldy bread; but mania especially is characterised by a peculiar odour. It is

* Polit. Essay, vol. i. p. 246.

not the *hircum olet* of Horace, but is a smell quite unique ; and when once recognised, it never can be mistaken for any other. It has been compared to the scent of henbane in a state of fermentation ; but I know nothing which it resembles.

This odour does not always attend on mania ; and it differs in intensity. Personal cleanliness of the skin, and frequent changes of body-linen, much modifies, and perhaps may remove it. Where it is generated, it is easiest detected by going in the morning into the chamber of the lunatic before he has risen, and before fresh air has been admitted.

The maniacal odour is not noticed by every writer on the signs of insanity. Nor, as I have said, is it always present ; but I consider it a pathognomonic symptom so unerring, that if I detected it in any person, I should not hesitate to pronounce him insane, even though I had no other proof of it.

I remember the case of a very delicate young lady, of good family, and highly educated, who became insane ; but whose family would not admit the correctness of their physician's judgment, till her mother, having somewhere heard of this characteristic symptom, upon entering her daughter's chamber before she had risen, detected this peculiar fetor ; and then she yielded to conviction of the nature of the malady.

The knowledge of this physiological fact may be found very useful, as a test of mental derangement, when there is difficulty in deciding.

The breath of maniacal persons has been remarked by Esquirol and other practical authors to exhale a very fetid smell, which some compare to that of stinking fish ; but I have never observed it as peculiar to the insane. As the stomach is often very much disordered, and the teeth from that cause are frequently carious and become loaded with sordes, the breath may thence be very offensive,

especially where the patients consist of the lower orders, who are unaccustomed to personal cleanliness. Esquirol may well complain of it in La Salpêtrière; for the inmates, according to his own report, are much affected by scurvy,—a disease in which the gums of course are spongy and putrescent.

The dejections of maniacs have commonly a very offensive, but not peculiar smell. Neither is it always the effect of vitiated biliary secretions, or unconcocted ingesta; for strong mental impressions often occasion singular changes in all the excretions.

COMMENTARY III.

DELIRIUM.

DELIRIUM and mania or insanity are commonly confounded and considered to be the same. But the delirium of acute and sympathetic diseases is different from that delirium or disturbance of the intellectual faculties which characterises insanity. It is true that derangement of those faculties is essential to constitute insanity, and that there can be no insanity without delirium. But delirium may be established quite independent of that peculiar action of the cerebral organs which is the maniacal. This distinction is very important to be observed; for as different affections, derived from different states of the brain, they require opposite modes of treatment.

That they are confounded, notwithstanding the diagnosis of each has been particularly marked by writers of authority, must, I think, be imputed in a great degree to the vagueness of the word delirium. It is to be regretted, that our vernacular tongue does not furnish any word which contradistinguishes the two morbid conditions of the understanding which fever and other acute disorders and insanity present.

Aretæus recognises a distinct difference between phrenitic and maniacal delirium. He conceived that in the former the sensorium was affected, for things not present appear to be so; in the latter, objects are seen in their proper light, but the conception of them is erroneous.*

* Morb. Diuturn. lib. i. cap. vi.

Hoffman appears to have been aware of the difficulty in discriminating, and therefore affixes the adjunct, *maniacum*, to designate the delirium peculiar to mental derangement. His example may be very inconvenient to follow, since delirium is the accompaniment of so great a variety of diseases and affections; but there is no other method when we wish to mark the difference.

Cullen expressly recognises a difference between maniacal and other deliria;* and had the distinction which he makes been duly regarded, the mistakes in the diagnosis of diseases attended by mental disturbance, would more generally be avoided.

Nosologists have added, perhaps, to the misconception of the real character of delirium, on account of the various ranks which they have assigned to it in their respective systems.

Sauvages and Sagar class delirium as the third order of *vesaniæ*, and make mania and melancholia distinct genera. Linnæus and Vogel rank delirium, mania, and melancholia, all as genera. Sennert, Boerhaave, &c. consider delirium in reference only to mental aberration, and examine it as a phenomenon independent on febrile action. Burserius gives it the importance of a genus; and so likewise does Crichton, who classes it as the first genus in his synoptical table, of which mania and melancholia are species. Foderé, still more recently,† has adopted it as a generic name for every form of insanity. Others maintain, that delirium implies mere raving, and is always symptomatic; and carefully direct, that in marking the diagnostics of diseases where delirium is present or mentioned, that it must always be understood as contradistinctive of insanity.

The late Dr. James Sims, in an excellent essay on mental alienation, treated of delirium as totally distinct from

* First Lines (1535).

† Traité du Délire, 1817.

insanity and fatuity, and divides it into two species, *desipiency* and *raving*.*

Dr. Robert Willis drew a distinct line between delirium and insanity.

“ In *delirium*,” he says, “ the mind is actively employed upon past expressions, upon objects and former scenes, which rapidly pass in succession before the mind ; resembling in that case a person talking in his sleep : there is also a considerable disturbance in the general constitution, great restlessness, great want of sleep, and a total unconsciousness of surrounding objects.”

“ In *insanity*, there may be little or no disturbance apparently in the general constitution ; the mind is occupied upon some fixed assumed idea, to the truth of which it will pertinaciously adhere, in opposition to the plainest evidence of its falsity ; and the individual is always acting upon that false impression. In insanity, also, the mind is awake to objects which are present.”†

The difference between delirium and insanity is here too briefly and generally described to be of much practical utility. This physician, however, regarded delirium and insanity as distinct.

Esquirol has treated of *La Folie* and *Délire* in separate articles.‡ He defines the latter thus : “ a man is in a delirium when his sensations have no relation with exterior objects, his ideas with his sensations, his judgment and determination with his ideas ; and when his ideas, judgment, and determination, are independent of his will.” But he considers delirium only as a sign or symptom of some morbid condition or action, and not as a distinct affection. His disciple, Georget, however, thinks that acute delirium presents all the varieties of insanity, and that it is easily distinguished

* Med. Memoirs, vol. v.

† Parl. Report, 1810.

‡ Dictionnaire des Sc. et Médic. tom. viii. et xvi.

from the delirium of insanity; that both deliria consist in a lesion of the same function, intelligence; but he alleges that they differ essentially in their characters, causes, and progress, as well as in the means of cure; and finally, that it is difficult to confound them, except in some intermediate and rare cases.

Falret gives a just caution against mistaking acute delirium for insanity; and is impressed with the difficulty, though he admits the utility, of defining the limits of each affection.*

The essential difference in the two species of delirium is illustrated by the physiological fact, that delirium is common in many of the acute diseases of childhood, but the delirium of insanity is unknown before the approach of puberty.

In true delirium the imagination is always deceived, which is manifested by optical illusions. That it is only the imagination acted upon, is proved by simply shading the eyes, which will suspend the delirium. A bandage thus placed has suspended particular delusions even for days; but they returned when the shade was withdrawn.† Reil reports‡ the case of a lady who thought she always saw spectres, monsters, &c. and immediately fell into a convulsive delirium; but if her maid even placed her hands over her mistress's eyes, the patient would directly call out, "I am cured." Reil adds, he saw the experiment tried with this effect.

Delirium may be pyretic or apyretic—that is, with or without fever; and, like other morbid actions, may be primitive, sympathetic, or symptomatic. But, though always important, it is sometimes very difficult, to ascertain its real character.

In this country, perhaps, it is scarcely ever an idio-

* Essai sur le Suicide, 1822.

† Dict. des Scien. Méd. art. *Folie*.

‡ Rhapsodien, Halle, 1803.

pathic affection, except in genuine mania, fever, or acute and chronic inflammation of the encephalon.

The proximate cause of delirium is always in the brain or its membranes. Although this organ may be primitively affected, yet, in most cases, it is only secondarily so. When primitively, there is a lesion of the moral and all the cerebral faculties; when secondarily, there is only a partial disorder; that is, one or more of the faculties is disordered, though sometimes all may be implicated even in this case. Delirium, too, may precede, accompany, or succeed fever; and fever may exist without developing delirium, as the latter may be elicited independent on febrile action. It may proceed from the excitation of pyrexia; inflammatory action of certain parts of the encephalon; insolation; the hysteric passion; noxious ingesta, as certain narcotics, alcohol, &c.; mechanic causes acting topically on the brain or some nerve; and from sympathy with a remote viscus morbidly affected; from metastasis, as in puerperal women, gout, rheumatism, &c.; or it may result from deficiency of nervous stimulus, as in the desipiency of low fever; from excessive sanguineous or other evacuations; also from inanition, and from old age itself. But delirium, although both symptomatic and sympathetic, yet is not necessarily consequential on fever, or any specific cause.

In *febrile delirium* the mind is generally a chaos, and a too vivid imagination is exhibited; yet some semblance of the original mind remains in the discordance of its component elements. The powers of combination do not exist—the words are not the symbols of the thoughts, nor do the actions accord with either. There is no perseverance, no energy, no clear determined purpose; and when some purpose is apparently contemplated, the means adopted to attain it are totally incompatible.

The patient may for a time be either insensible, or

in actual error respecting all external objects, being solely occupied with those phantasies which rise and rapidly succeed each other in his errant imagination; or he may fancy things present which are absent. The degree of febrile heat may be more or less; and the delirium will generally bear relation to it.

During a paroxysm of febrile delirium, the patient will destroy himself or others: there is no discrimination of persons or things, no combination of ideas or objects; what he does or says is not the effect of design, but of accident or impulse. From whatever cause this delirium proceeds, if it do not subside, its final termination seems to be coma or apoplexy, and death.

Maniacal delirium is distinguished by the absence of fever, and generally of any specific local stimulus. When it does proceed from the latter cause, the delirious paroxysm will continue even when the specific stimulus is removed. There is sometimes an increase of heat of the surface, but it is oftener local and confined to the scalp, or the heat is the result of violent muscular exertion. It has not the characteristics of pyrexia; and there is no accord between the increased heat and the attendant mental disturbance. Besides, there is usually profuse partial perspirations, especially about the throat and neck.

Although the degree of fury be as great in mania, and the ideas as rapid and fugacious, and things appear to be embodied as in a dream or reverie, yet is the patient sensible to surrounding objects, or when directed to them, he easily and correctly discriminates. One, or several only, but not all the intellectual faculties, are in error, and perception and the external senses are often very correct; but his conceptions are vague and illusory. Coruscations of intelligence or of acquired knowledge break forth, the eclipse of the understanding is temporarily dissipated, and a degree of wit or talent

never before witnessed or suspected is elicited, even to the perfection of elaborate works, both in belles lettres and the arts and sciences.

Neither is the muscular force, often so intense, regulated by the degree of the mental disturbance. The delirium may be high or low, yet be accompanied with a preternatural augmented nervous irritability, and a capability of exertion immensely disproportionate to the form and natural powers of the patient.

The delirium of fever may degenerate into mania: they are, therefore, convertible into each other.

When there is a perfect delirium without fever, but with a quick pulse and complete confusion of ideas, some profound lesion of a vital organ is to be suspected.

Pure mania is alleged by some not to be always free from real fever; but if fever be detected, it is certain that there must also be attending some other, though perhaps latent, disease, whence it originates; and hence a suspicion ought to arise that the case is not proper mania. During cerebral or meningeal inflammation, for instance, the patient may be outrageous; but the fury here is the delirium of febrile action, — it is not insanity.

I have remarked a species of low delirium consequent on furious mania, and in character much resembling that of low fever; but the resemblance is only in appearance; for in the former the patient is capable of suddenly exerting amazing muscular power, while in the latter he can rarely use much force. Irritability in low fever is commonly so exhausted by the general celerity of the circulation and increased temperature, that although, during the attendant delirium, there is similar subdued muttering, and similar phantasies and inclinations prevail, yet the nervous energy and the intellectual faculties are both too much enfeebled for exertion of any kind. But in the low delirium of mania, where there is neither accelerated circulation nor increased heat,

irritability seems to be concentrated, and the muscular powers preternaturally accumulated.

Dr. Sims, in the paper referred to, speaks of a species of low delirium, which he called *desipency*, and thought that it had been then unnoticed by authors: "The patients," he says, "lie mostly on their back, with a vacant, relaxed countenance; their eyes shut, or, if open, fixed upon vacancy, the pupils not being contracted to the degree proper for seeing the object towards which they are turned; they are continually muttering in an incoherent, irrational manner; they attend to nothing around them; and when roused by the by-standers to pay some little attention, after giving, perhaps, one tolerably rational answer, they immediately relapse into their former nearly insensible state; they are continually picking at the bed-clothes, or if dozing, their fingers are in constant trifling motion; their pulse is quick, but small and unequal, so as to be difficultly counted, and when numbered, to give the utmost variety; their tongue often appears nearly as in health, but when put out has a tremulous motion, as have their extremities; their skin is soft and relaxed, seldom betraying much heat; they are insensible of their evacuations; of inclination or appetite, even for drink, they seem almost destitute. They are sometimes fretful with their attendants, but that quickly subsides."

His description, also, of the raving or high delirium is, in my judgment, equally correct. "The patients scarcely ever close their eyes, remaining a week or more, if they live so long, without any sleep; their eyes are dry and mostly blood-shot; they fix them with great intensesness upon vacancy, where they obviously think they perceive persons or things seen by nobody else, with which they hold conversations apparently very interesting to themselves; they are always intent, in appearance, upon something, which, however, can rarely be comprehended by the attendants; they have an eager, often a fierce look;

they throw about their arms much, and are perpetually attempting to rise from bed and to go somewhere, and yet, if permitted, they know not what they would be at; they are exceedingly quarrelsome with their attendants; they attend not to their evacuations; they know not where they are, though perhaps in their own bed-chamber; and they as little know those about them — yet, if forced to attend, they take it very ill to have their knowledge questioned, being very irascible; their skin is hot, often dry, or if sweating, only partially so about the upper parts of their body; their pulse is quick, but full and sharpish in the stroke, and tolerably uniform; their tongue is dry, lips and teeth covered with a black fur; they are mostly thirsty, preferring cold water to every other beverage.”

In the autumn of the year 1800, Dr. Willan remarked,* that phrenitical cases of short duration were more numerous than usual in London. The malady affected persons only of a debilitated constitution, who had been previously subject to headaches, with an irregular pulse. The delirium was at first mild, and finally an incessant raving, in which all corporeal sensations were obliterated. Three out of five so affected died. In some, the delirium ceased at the end of a month, and in two or three weeks their strength and intellects were restored. This observant physician considered the affection wholly distinct from the violent delirium of fever; and of course distinct from that of mania, since he subjoins an opinion that the supposed increase of the latter malady is erroneous. He adds, also, that it is not properly noticed or arranged by nosologists, although it is probably the same as that described by Sims.

Many similar cases to which I have been called, had been treated as mania before I was consulted, and severe

* Report of London Diseases, p. 328.

depletion adopted; and where that practice had been pushed, I never saw any of these patients survive beyond four or five days. Others I have attended almost from the development of the delirium, and though I have most cautiously abstracted blood, or sometimes none, and have prescribed various and opposite remedies, and in two or three cases life has been extended to the tenth or twelfth day, yet the event has generally proved mortal.

The high delirium is often mistaken for typhus, mania, and delirium tremens; but there is not the uniform pyrexia and prostration of the first; there is too much heat and diminution of muscular power for the second; and there wants the habitual exciting cause, alcohol, whence proceeds the latter.

Intoxication is a state of delirium, and a prototype of mania. In this condition the demonstrations of disordered circulation and determination are clear. The heart and arteries increase in momentum: hence the pulse is quicker and stronger than in health, the temperature of the skin is heightened, the face flushes, the eyes are red and suffused, a great determination of blood to the head is conspicuous, delirium and acts ensue indicating strongly that the intellectual faculties are disturbed; and if the debauch be pushed to excess, the sensorium is affected, sense and motion are suspended, and coma, apoplexy, or real insanity, may follow.

The effect of all diffusible stimuli, such as alcohol, wine, &c., is modified by the peculiarities of the constitution; and, like insanity, exhibits a variety in character. At first they produce elevation of spirits, vague and unnatural perceptions, the judgment remaining entire; more stimuli occasion a perfect delirium, in which the ideas are confused; and perception and judgment being overcome, the person talks and acts irrationally. One, a very little alcohol will intoxicate; a second requires a larger quantity; and a third is scarcely susceptible of that

effect, although the quantity drank be immense. Some are exhilarated and joyous, some riotous and mischievous, some lascivious and obscene, some raving and dangerous; others, again, are dull and stupid, comatose, and apoplectic;—all which symptoms denote disorder, not only of the vascular, but of the nervous system. The latter is probably first affected, and the former is implicated by that reciprocal influence ever subsisting and acting.

There is, however, a striking difference between the delirium of intoxication and of insanity. When the exciting cause of the former is dissipated, there is little or no recollection of what passed during that condition. In the latter, there is frequently upon recovery a clear remembrance of all that happened during the existence of the malady. Whether, when insanity succeeds inebriety, the excitation has been so great as to induce some change of structure in the organ of reason, or that the morbid action continues, although the exciting cause had speedily evaporated, is not to be explained.

Being what is vulgarly called *dead drunk* is a real state of apoplexy. Short of this state, intoxication produces a profound and soporous sleep.

During the whole course of a drunken bout, a considerable degree of disorder prevails in the heart and arteries. The circulation is accelerated, and is stronger than usual. This probably is the first effect of alcohol.

Habitual drinkers of spirits in excess become at length in a continued state of tremor, wake very early, and have nausea and want of appetite; and their ideas are very confused till some alcohol be taken into the stomach. Delirium tremens seems to be this condition heightened and concentrated, and assuming more the form of acute delirium.

Sleep is the natural solution of this delirium, as well as of that of temporary intoxication, but not so of insanity; and here analogy fails, and identity must be abandoned.

Sometimes delirium presents itself which is clearly proceeding from sub-acute inflammation of the encephalon, and possessing the characteristic of delirium tremens, *i. e.* trembling of the hands.

Mr. ———, aged forty, and naturally a stout, healthy, and remarkably sober man, for some weeks complained of sharp pains in his head, and confusion of ideas. At length he was seized with a degree of stupor. The circulation appearing much oppressed, a very large quantity of blood was reported to me to have been taken from the arm. He recovered, and went into the country for a month. Some change in his manner, however, occurred soon after he returned home, and he evinced great restlessness and anxiety; and his ideas and speech were often unconnected.

I was consulted January 23d. I found his face exceedingly flushed; eyes much injected with blood; throbbing, and pain in the head; pulse quick, and irregular; tongue white; manner hurried; speech slow, and he answered questions hesitatingly; great watchfulness; skin moderate; bowels had been well opened.

The head was shaved, and twenty ounces of blood were abstracted by cupping on the occiput; refrigerating lotions were applied; and saline draughts, with hyoscyamus, prescribed.

24th. — The same; no sleep.

25th. — Violent and delirious. He lost fourteen ounces more of blood by cupping; and was well purged by calomel and the senna mixture.

26th. — No sleep; he was very agitated; and the symptoms very analogous to delirium tremens. His arms and fingers were in constant motion. A full opiate was given.

27th. — Had slept, and seemed more composed, and refreshed; but the delirium continues.

28th. — Same.

29th. — Had a slight convulsion, and died in about four hours after it.

Examination, *post mortem*. — Cranium very thick, and dense; dura mater inflamed and thickened, especially about the longitudinal sinus. Between this and the arachnoid membrane, a deposition of coagulable lymph. Effusion on the pia mater; all the arteries very turgid; the substance of the brain on slicing exhibiting bloody points; vessels of the parietes of the lateral ventricles and plexus choroides beautifully injected, and the latter studded with hydatids. There were about two drachms of serum in each ventricle, and a large quantity in the theca vertebralis. The clinoid processes of the base of the skull were singularly prominent and sharp.

True delirium sometimes succeeds mania, and then indicates great danger.

Mr. ———, aged forty-six, with an hereditary maniacal-epileptic predisposition, was attacked suddenly by mania. He had several times previously been similarly affected, in the last of which I attended him, about a year before. He was immediately put under proper restraint; and as cupping, purging, &c. had restored him formerly in a short time, the same practice was now adopted. He, however, did not improve; and I was called in on the fifth day. The symptoms very much corresponded with those which attended the last attack. He was not now, however, either so stout or so strong; and, indeed, from the account of him, he had not been in good health a long while.

Violent pain and throbbing in his head had come on the day I first saw him; his eyes were prominent and suffused; he had had no sleep for many nights; the bowels were extremely constipated; great restlessness; very vociferous; skin hot, but moist; pulse 100, and full.

I expected an epileptic fit. He was cupped again, but not on the occiput, as I wished, for his friends would

not permit his head to be shaved; blood, therefore, was taken from the nape of his neck. The bowels were so obstinate that they were not well evacuated for three days. When that was accomplished, as he had had no sleep, and as an opiate had an excellent effect in his last attack, three grains of opium and five of calomel were prescribed. He slept four hours. The second and third night an opiate produced no good effect. The disease put on now more the character of delirium than of mania; the pulse was 130, and small; skin hotter, but with immense perspiration; he recognised neither persons nor things about him; talked incessantly, without any connexion of ideas; and he became unconscious of his evacuations.

Ninth day.—He was much weaker, lying on his back; tongue brown; slight subsultus. He died the twelfth day from the attack.

Upon the change of the character of the disease, blisters were applied to his thighs and legs, and sinapisms to his feet; and he was supported by a considerable portion of nutriment, &c. An examination *post mortem* was not permitted.

This person had unfortunately imbibed the doctrines of the impostor, Johanna Southcott, and was one of her zealous disciples. Perhaps his constitutional predisposition rendered him peculiarly liable to wild and extravagant religious delusions; and the efforts which his zeal prompted were quite sufficient to turn such a brain.

I had cautioned him, after my first attendance, on the danger of pursuing his deluded course. For a time he refrained from reading the books, and attending to the affairs, of these enthusiasts; but he returned to them, and mental derangement and death soon followed.

Sometimes also the development of delirium precedes and gives warning; and the subsequent history of the case, together with a more minute examination, point

out that it is symptomatic of cerebral, or other organic, or of some approaching acute disease.

Delirium is often the effect of re-action, and if it be in excess in a system already extenuated and debilitated, will soon produce organic lesion and death. A lady of fortune, about sixty years of age, and of such penurious habits that her diet was scarcely sufficient, either in quantity or quality, to support nature, was persuaded to pay a visit to some kind and hospitable friends in the country. Here, as she could partake of every good thing without cost, she indulged in what was excess to her, and drank two or three glasses of wine daily, to which she was quite unaccustomed. In about ten days, symptoms of aberration of mind were evident; and on the third day after, she was brought home. I saw her the same night. She was in a high state of delirious excitation; eyes blood-shot, and a very full pulse. On the second day there was nausea, and efforts to vomit. In a few hours she suddenly vomited about four ounces of venous blood, evidently from the stomach. On the fourth day hæmatemesis occurred again, to nearly the same extent. She sunk from the effect of it. However, from the support given, her life was protracted to the sixth day, when she died.

The treatment adopted was to moderate the re-action; but little could be done where the vital powers were naturally so feeble, and such serious mischief inflicted on so important an organ as the stomach.

In this case there was an hereditary predisposition to insanity; and an eccentricity pervaded the whole life of the patient. But no mental derangement had been before exhibited.

Delirium, even to the inducing of suicide, is often a mere symptom of fever. When so, it usually occurs at the commencement, before fever has attained a considerable height; and the attempt at suicide is plainly an extemporaneous impulse, and absolutely without preme-

dition. As fever proceeds, the delirium is of a more violent character; but impels outrage upon surrounding objects rather than upon self: as it advances, the delirium partakes more of desipency and melancholia; but whatever may be the inclination, the powers of exertion become too enfeebled to commit violence.

Let it be remembered, however, that whether delirium be the result of fever, cerebral inflammation, local irritation, metastasis, re-action, or any other cause, it is susceptible of being converted into permanent insanity. It is when delirium is protracted after the exciting cause has ceased, that it assumes the maniacal character. This is frequently exemplified in the delirium of puerperal women.

The mental derangement often attendant on the puerperal state has been considered pure delirium. As a general rule, this is not correct. When the mental disturbance is the concomitant of febrile excitation consequent on the secretion or suppression of the milk, or when inflammation and suppuration of the breasts have occurred, it generally partakes of the character of true delirium. But even at these periods mania or melancholia may supervene. Indeed, when delirium attends on other stages of the puerperal state, it participates most in the maniacal character.

There is also a species of delirium often supervening on convulsive diseases. Here, when the delirium is developed, the convulsions cease; and conversely, the convulsions supervene on the delirium. This frequently occurs in paroxysms of violent epilepsy.

Delirium is generally supposed to be a pathognomonic symptom of inflammatory action of some portion of the encephalon. Many pathologists assert that it never is produced by inflammation of the substance of the brain; but that it appertains expressly to inflammation of its membranes, especially of the arachnoid coat. On the contrary, dissection proves that both the brain and its

envelopes may be inflamed, even to suppuration, without any disturbance of the intellectual functions.

The physical difference between idiopathic delirium, as in cerebral inflammation, and the morbid action of the brain which constitutes the delirium of insanity, is shewn by the former being acute and fatal, and the latter chronic, but rarely mortal, and when so, by its being rather the consequence of another disease.

Symptomatic delirium is of course a more common affection; but whenever it is developed, especially unaccompanied by fever, and with a quick pulse, it ought to be viewed with apprehension, as it is always the effect of a lesion of some important organ, or of some violent morbid action in the system. This delirium also has its modifications, and may be of a character either gay or sad, and each may present itself alternately or successively in the same malady. Thus in an epidemic, the delirium in some may be mild, in others furious; in the one happy, in another sorrowful.

These diversities appear to be influenced by peculiarity of constitution, conversion, duration, and the different modes of treating the primary disease, of which these deliria are but symptoms. In inflammatory and bilious fevers delirium is not rare.

Whenever extreme levity of manner or gaiety is observed at the commencement of any disease, we should be suspicious; for such signs frequently usher in delirium. At this period, a trifling depression of spirits is more natural, and seldom indicates any thing serious.

Delirium often succeeds long-continued wakefulness, inquietude and anxiety, violent pains in the head, vertigo, increased susceptibility of the external senses, or accelerated or irregular action of the sanguiferous system. Many are so irritable that they never experience fever, however ephemeral, or any severe malady, without being delirious.

Sometimes, indeed, delirium will continue when the apparent cause of it ceases; but in that case it assumes one of the forms of real insanity. For it is a law, to which delirium, from whatever cause it springs, is obedient, that if it be protracted after the exciting cause is removed or worn out, active insanity ensues, — just as other morbid actions sympathetically elicited from a diseased organ, are continued, though the viscus primarily affected has resumed its natural healthy function.

What further proves the actions of delirium and insanity to be dissimilar, is, that that condition of the system from which the former results is the most frequent and readiest mode of terminating the latter; — the super-vention of fever to mania or melancholia, or even to demency, or idiocy not connate or mechanical, being always hailed as a prognostic favourable to returning reason.

Indeed, all the most efficacious remedies, such as vomiting, purging, salivation, tonics, the bath, gestation, &c., operate by inducing a new and increased action in the circulating vessels, co-essential with febrile action, and in this way supersede the maniacal action.

Again, there is a delirium peculiar to the last stage of acute diseases, and which, when it appears, sometimes actually suspends the progress of the disease of which it is the concomitant and the stroke of death. This often occurs in cases of pulmonary consumption; more frequently, however, it is the immediate precursor of fate. It is very different from that state of the intellectual faculties often evinced at that awful crisis when death approaches, and which imparts to the words and acts of the dying an apparent spirit of divination. Among the ignorant and superstitious, both these states of delirium have been regarded as the same, and ascribed to inspiration. In the earlier ages, diseases so attended were designated *sacer*, or sacred; and in the dark ages conferred on the departing the character of holy.

In the former case, however, this delirium probably proceeds from the translation of irritation from a remote morbid organ to the brain. In the latter it is

“ Expression’s last receding ray,
A gilded halo hovering round decay ;”

the simple but sublime elevation of the mental over the corporeal essence, when the present world and all its attachments are unloosed — when we cast off all the grossness of mortality, and are putting on immortality.

Delirium is often the result of local irritation from wounds, contusions, and other bodily injuries, but especially from compound fractures ; during which the patient is quite unconscious of his situation, or of any pain. This may occur without fever, and may be the effect of mere sympathetic irritation. Mr. Abernethy, in his Lectures, comments upon this curious species of delirium. The patient will give rational answers when you rouse him, and then goes on in sportive fancifulness, acting up to these delusive imaginations, which are often even of a cheerful cast. It is well observed, that it must be regarded as a very benevolent effect of nature’s operations, that extremity of suffering should thus bring with it a state of unconsciousness, which proves the antidote to pain.

M. Dupuytren has recently noticed a somewhat similar mental affection, which he calls *traumatic delirium*, and which is sometimes the consequence of surgical operations. The patients tear open their wounds, commit suicide, or get up in the middle of the night, and commence assaults of extermination, with any weapon at hand, on all around. If within twelve, twenty-four, or forty-eight hours after an injury or operation, the patient appears to be in unusual good spirits, with loquacity, glistening eyes and rapid movements, and there is an affectation of high courage and resolution, the explosion of this delirium may be expected.

There can be little doubt but this is a pure sympathetic nervous affection ; for in the midst of the greatest violence and disorder of the senses, the circulation is quite calm, and the skin cool. The pulse is regular, full, and of the ordinary frequency. If properly treated, this state rarely lasts longer than five or six days. Quietude, a judicious restraint, and injecting six or ten drops of laudanum *per anum*, quickly restores tranquillity, and induces sleep and the entire departure of the delirium.

Many surgeons, says Dupuytren, have considered these symptoms, coming on under such circumstances, as marks of inflammatory action, and have pursued opposite and wrong measures.

Occasionally, however, bodily injuries and exquisite pain will produce the true delirium of mania, with all its concomitants. This is proved by the maniacal action continuing long after the cause that gave rise to it is removed. Where a maniacal predisposition exists, such an effect will not occasion surprise ; but it will sometimes occur where no hereditary predisposition can be traced.

Many conditions of disease elicit delirium of a character peculiar to themselves. As, for instance, the pelagra of Lombardy, which is always accompanied by a desire of self-destruction by drowning ; and the endemic remittent bilious fever of Bussorah, with greatly increased vascular action and determination, and consequent delirium, which always induces *tedium vitæ*. Most of those suffering under the latter malady would destroy themselves if not prevented. This delirium is not that of fever, but the consequence of it. From the frequency and the uniformity of this characteristic symptom, the natives familiarly call it the *seeā dāh*, or a strong desire of self-destruction.* Dr. James Johnson also speaks of the mad delirium of the bilious fever of Bombay.†

* Trans. Soc. for Promoting Med. and Chir. Know., vol. i. p. 86.

† On Tropical Climates, p. 114.

Men, and it is said animals also, of European origin, are attacked in certain mountainous parts of Peru, to which it is peculiar, with a phrenitic delirium, from which, if the former recover, it is mostly succeeded by a low and despondent state of mind; and during this delirium, the latter, losing their natural instinct, cannot avoid the rocks and precipices of the country, and consequently perish. Indigenous animals are exempt from this affection.*

Many French soldiers are reported to have been delirious in the Peninsular war, before they were *acclimaté*, i. e. inured to the climate: while in the disastrous retreat from the frozen region of Russia, they were in a state of frantic delirium from the opposite extreme of temperature.

Dr. Bietnitz records, that a number of French officers were attacked with acute delirium in the hospital of Pirna, which quickly degenerated into the chronic form of mania; and that he found the dura mater of those who died much thickened.

But the analogous mental effects here presumed from such opposite extremes of temperature, might also be equally ascribed to other and very different causes, viz. to the fatigues, privations, and extreme misery, to which in these military expeditions the men were exposed.

There were numerous cases of delirium among the inhabitants of Malta after the late plague. But in such dreadful visitations, and where physical and moral causes may be supposed to have equal effect in depressing and altering the corporeal and mental powers, it is impossible to decide which most predominate in producing delirium.

Natural phenomena may produce effects on the human system, which occasion in some simple delirium, in others furious mania.

Thus the inhabitants of Valencia, the Caraccas, &c.

* El Mercurio Peruano, Lima, 1794.

in South America, were for more than twenty days after the great earthquake in 1812, in an extraordinary state of corporeal effervescence and mental aberration. Such, indeed, was the effect of this dreadful calamity on the nervous system, that many suffering under the endemic intermittent fever of that country recovered immediately from it.*

Long fasting produces furious delirium. Numerous examples of this state of mind, from deprivation of food, are recorded in the annals of military and naval transactions. In most of these cases, moral are combined with physical causes, to affect the mind. Horror, hopelessness, and despair, unite with hunger, and terminate in madness and death.

A captain of a ship, after being wrecked, was the only one of six, who had endured the same extremity of famine, that retained his faculties at the period when they were accidentally relieved. The latter part of the time, when his health was almost destroyed by privation and long suffering, a thousand strange images affected his mind; every particular sense was perverted, and produced erroneous impressions; fragrant perfumes had a fetid odour, and all objects appeared of a greenish or yellow hue.†

A perfect delirium, without insanity, appears to have reigned among the crew of the *Méduse* French frigate, which was wrecked, in July 1816, off the coast of Africa. While they were drifting on a raft, exposed to all the horrors of desertion by their commander, famine, and supposed inevitable death, many fancied themselves in different places; and some, in preparing to carry into execution the illusions of their delirious ideas, fell into the sea, or committed the most outrageous acts. When most urged by hunger, the imagination became more

* Journal of Science and the Arts, No. IV. p. 401.

† Goldsmith's History of the Earth, vol. ii. p. 126.

disturbed, and their actions the most furious. Horrid scenes of ferocity, murder, and suicide, followed. In those who survived, and when despair and want no longer prevailed, the former delirium and false perceptions perpetually recurred. Even fifteen days afterwards, M. Sévigny, the surgeon, says, "I felt that species of mental derangement which is produced by great misfortunes; my mind was in a continual agitation; and during the night I often awoke, thinking myself still on the raft. Many of my companions experienced similar impressions. One, François, became deaf, and remained long in a state of idiotism. Another frequently lost his recollection; and my own memory, remarkably good before this event, was weakened by it in a sensible manner." He adds, that a determination of blood to the head was very evident whilst they were under a burning sun and enduring such miseries; and that a state of calmness and return of reason came on previously to death.

The delirium in these cases was plainly evolved by physical changes in the system, and was consequential on a state of inanition and cachexy, induced by exposure, privation, excessive fatigue, and apprehension.

There is likewise a species of delirium proceeding evidently from a moral origin. Here the impression and delusion are imbibed by communication and association, and the force of example proves contagious. Thus, where the disposition, degree of intelligence, and circumstances, may be supposed to be nearly equal, and favourable, a delusion spreads, and almost simultaneously affects a multitude. Probably, this epidemic delirium should more properly be ranked as a mild species of insanity.

Nothing more is required than to possess a vivid imagination, with easy credulity, or great ignorance. Example in such persons suffices to generate that morbid action which constitutes the *mens delira*. Even in cases where persons are reduced to such dreadful extremities

as in the Spanish and Russian campaigns, or as in the shipwrecked mariners, it is not impossible that the delirium attending might be influenced in a degree by the contagion of example, as well as from their actual physical and moral privations.

Enthusiasm, whether in warfare, politics, or religion, often amounts to delirium. Here the moral feelings are exalted, to the extinction of judgment. Even the votaries of religion and peace, in the fervour of their zeal, sometimes commit actions which too plainly evince that perception and judgment are in opposition, and that sometimes both are wanting; and the contagion spreads with all the rapidity and force of an epidemic. Men, too, in the ardour of military achievements, often attempt and accomplish actions, the extent and consequences of which they neither can perceive nor judge, and their example influences their companions in arms.

We might multiply similar examples of delirium, both from ancient and modern history.

But enough, perhaps, has been adduced to prove that there originates a morbid action of the cerebral organs, which constitutes a species of delirium, as distinct from that of fever and inflammation as it is from that of mania.

I shall refer only to one other species of cerebral disorder, but which appears to be *sui generis*, and further illustrates the various ways in which the brain is affected in producing real delirium.

Unhappily it is an affection too common, and being likely to become more so, I shall treat separately of it.

COMMENTARY IV.

DELIRIUM TREMENS.

THE affinity of the delirium of insanity and ebriety is, by a superficial observer, supposed to be very close. The wise Seneca has said, “*Ebrietas nihil aliud est, quàm voluntaria insania.*”^{*} But the delirium of each, as I have shewn (p. 309), is distinct. That of which I am about to treat is peculiar to habitual drunkards, and differs materially from the delirium of an ordinary debauch.

Although this affection is at first temporary in its effects, yet, by repetition, it becomes permanent, and greatly increases the number of lunatics. This malady, therefore, demands particular notice.

Fifty years ago, it was so rare as to be unnoticed by medical writers. It is now too well known in the United Kingdom; more so, perhaps, in North America; and, in fact, in every country where the vice of drunkenness prevails.

By the Americans it is designated *delirium è temulentia*, and *mania à potu*, from its exciting cause; and by Dr. Frank, *treme-faciens*.

Dr. Thomas Sutton has given an excellent description of it,[†] and has adopted the designation *delirium tremens*, from a particular symptom which generally accompanies it, and which may be considered pathognomonic; that is, a tremulous movement of the hands. But this symptom

^{*} Epist. 83.

[†] Tracts on Delirium Tremens, &c. 1813.

is not always a concomitant, and therefore some objection may be urged to the appellation.

Dr. Armstrong calls it the "*brain fever of drunkenness*,"* and considers it a strictly febrile disease. This, however, is contrary to the general view of its pathology; and I think the symptoms, appearance of the blood, and nature of the remedy (opium), which is found to be almost a specific in this disease, evince that it does not present the genuine features of pyrexia. Therefore, though not free from objections, I consider *delirium tremens* the most appropriate designation.

The history of this disease is somewhat curious. It appears that it was recognised as a distinct mental affection by the late Dr. Saunders in his lectures, forty years before Dr. Sutton published his tract; and that it was also considered on the coast of Kent as being peculiar to drunkards, long before that period. From Dr. Armstrong's observations we learn, that the medical practitioners in Northumberland and Durham, about the same time, remarked this disease; and that Dr. S. P. Pearson, of Newcastle on Tyne, in 1801, published an account of it, and recommended opium as a remedy; a remedy, however, many years before prescribed for it by Dr. Young, of the same town.

This affection had not then obtained notice in any system of physic, and was confounded generally with acute inflammation of the brain, or with mania. Dr. Sutton remarks, that while he resided in East Kent, from 1798 to 1807, he was first led to perceive the distinction between phrenitis and delirium tremens; and that previously he had considered the latter to depend upon active inflammation of the encephalon, and to require copious depletion, vesicatories, purging, &c. But as the ill success attending this practice was obvious, and other

* Practical Illustrations, &c. 1819.

practitioners in the neighbourhood were treating it by opium with great advantage, he adopted that remedy; and subsequent experience of its good effects has confirmed him in the practice. This judicious physician adds, that he never could discover how a practice so different to that which the character of the disease seems to warrant came into use. But I think a ready explanation may be found in the doctrines and stimulating practice of the celebrated Brown, which were in high estimation at the date when this disease appears to have been first observed; and thus opium was prescribed in course as a remedy.

Some consider this malady as genuine mania; but besides being usually of the duration only of a few days, if the symptoms be studied, it must be pronounced a real delirium. If, however, it run on above two or three weeks, as in every other case where the circulation is violently stimulated and the brain excited, long-continued or permanent mental derangement will follow. Indeed, if a person subject to this effect from excessive drinking be not cut off by some other disease, frequent repetition of it is sure to terminate in incurable insanity.

If the advocates of the corporeal origin of insanity had adduced as a proof of it the effect of alcohol on the understanding, even in ordinary cases of inebriation, it must have sufficed to have established the fact; for nothing is more certain than that the mind in this case is affected through the medium of the body. Long-continued or permanent mania will result from a single debauch in wine. But here is a mental disorder so distinct and uniform in its characters as to be recognised and classed by nosologists, and which confessedly has its origin in the application of a stimulus to an organ remote from the seat of the mind. How could such a proof fail of effect?

Delirium tremens is in truth a sympathetic affection of the organ of intelligence, arising from a morbid

action of the stomach, and probably of the liver also, produced by the stimulus of ardent spirits. The nervous system is, by frequent application of so strong a stimulus, at first violently excited and irritated; and by repetition, the sensorium is so affected as to occasion a temporary effect similar to partial palsy. In time, organic changes of the viscera implicated in these morbid actions take place, and death, or permanent alienation of mind, ensues.

M. Lèveillé, in a memoir on this disease,* enters largely into the consideration of the pathology of it. He conceives it to be a morbid and special excitation of the brain, independent of arachnoiditis or gastro-enteritis, with which it is sometimes complicated; and he supposes that the alcoholic corpuscles are intermingled with the arterial blood with which they come in contact by absorption, and thus act as a stimulant to the cerebral substance. In this way the cerebral and gastric phenomena are at once produced, the former being always more important than the latter; and both these effects may be effaced by the operation of one sole remedy, opium.

In four fatal cases M. Lèveillé met with, where narcotics were ineffective, he was convinced that death was in consequence of gastritis or entro-gastritis being more severe than usual, or was imagined.

The description of this malady has been so faithfully portrayed, that I scarcely need do more than copy it.

The first feelings of indisposition are lassitude, indistinct chills, debility, loathing of food, uneasiness, and heat of the head; disturbed short slumbers, frightful dreams, constant restlessness, anxious countenance, and oppression at the pit of the stomach. These symptoms are followed by retching or vomiting, a white moist tongue, wild-

* *Mémoire sur la Folie des Ivrognes; ou sur le Délire Tremblant.* Mém. de l'Académie Royale de Médecine, Paris, tome i. 1828.

ness and quickness of look ; pulse at first a little quickened and rather unsteady, afterwards more rapid ; general irritability, watchfulness, and dampness of the skin, which is increased by the least exertion ; sometimes profuse sweat, especially about the head and throat, having often an offensive odour. The tremors of the hands which characterise this complaint are constant, the tendons of the wrists are in perpetual action, by which the hands are drawn inwards ; sometimes there is also *subsultus tendinum* and *singultus*. If the patient be still, and have his hands at liberty, he makes various motions with them, and continually picks the bed-clothes ; if his wrists only are confined, he picks his fingers and nails. Great confusion of ideas, lapse of memory, and positive delusions, supervene. When the paroxysm runs high, the patients are often unconscious of the calls of nature ; the pulse is now very quick, little thirst, and the countenance dull and heavy. They are very suspicious, imagining their pecuniary affairs are ruined ; that there are conspiracies to poison, shoot, or rob them ; that they are in a strange place ; and there is a constant desire of ubiquity. They fancy that they see objects present which are not, and are generally haunted by frightful images, from the apprehension of which, they call loudly for assistance to drive them away ; or that they hear voices or strange noises in particular places, and they will listen and speak as if conversing with somebody. Sometimes they declare vermin are crawling over their persons or bed-clothes, and will motion as if driving them off. They imagine they see bright or dark spots, or coruscations of light, passing before them.

Sometimes they are intent upon calculations, settling accounts, reckoning money, building or projecting, and various imaginary employments ; and are so absorbed that they will disregard all questions, or beg not to be interrupted. They are very impatient of contradiction,

and tenacious of their opinions; but when spoken to mildly, and not opposed, will answer a distinct question rationally; but if conversation is attempted to be pursued, they soon grow confused and incoherent. They generally for a moment recognise persons; but sometimes they mistake persons and things, and often forget or misplace words.

These symptoms continue commonly from three or four to ten days, rarely a fortnight, and if beyond a month, are apt to end in insanity. Supposing no active remedies are administered, and death does not cut off the patient, the symptoms gradually diminish in force, and the delirium suddenly ceases, upon waking from a sound sleep.

When these cases terminate fatally, the remarkable degree of watchfulness which always accompanies the height of the paroxysm, lapses into insensibility, upon which coma or serous apoplexy supervenes, and death then follows.

Delirium tremens is said to occur most frequently when, after repeated fits of intoxication, the stimulus of the ordinary quantity of spirits has been omitted for a time. This possibly may be so; but I have more often met with it immediately consequent on a continued excess of drinking; and the suspension of the habit has rather been from inability to persevere, than a sober resolution to refrain from it. I think it very probable, however, that the state of collapse which would follow on suspending the stimulus, is likely to occasion the attack. Danger is always to be apprehended if the patient sink into coma, with vomiting, a very cold clammy skin, contracted pupils, and a very rapid, small, jerking pulse. I have seen three patients go off in this way. If any real mental affliction have caused the habit of drinking, the concomitant depression, as reason resumes her sway, greatly protracts recovery, and sometimes terminates the malady in melancholia.

Those also who have produced, from habitual drunkenness, chronic disease of the liver, are in greater peril of a mortal event when seized by delirium tremens. The dissection of the brain of habitual drinkers who have died insane, commonly exhibits morbid appearances ; but of the brains of those who have died of delirium tremens, there are very few dissections published. Dr. Armstrong mentions, that of two opportunities which occurred in his practice of *post-mortem* examinations, there were in both slight congestions found in the brain and liver, while the other viscera appeared natural.

I have met with several fatal cases. In three of them which were examined, each dissection displayed considerable venous congestion and effusion of serum. In one man, who died very suddenly, between the membranes, in the ventricles, and theca vertebralis, there was an immense accumulation of serum.

The late Dr. S. F. Simmons refers, as I have remarked, to a state of hydrocephalus peculiar to maniacs, which he thought particularly worthy of remark.* He dissected the heads of six such cases : two of these patients were great drinkers of spirits. Morgagni met with two similar instances, from intemperate drinking. There were large collections of water within the encephalon in all these cases.

These examinations prove the effect which habitual drunkenness has on the brain ; and as the delirium of drunkards is not noticed by these authors as a peculiar affection, it is not unlikely that several of the patients had been affected by delirium tremens.

Inebriation converts voluntary into involuntary motions ; and habitual drinking of spirits at length produces constant wakefulness, and gastric and cerebral irritation. Thus the power of volition over the mental, sensorial,

* Lond. Med. Journ. vol. vi. p. 159.

and muscular powers, is impaired, and all the other symptoms which characterise the progress and acmè of delirium tremens are elicited. The disorder of the vascular system, which is first implicated, is succeeded by disorder of the nervous system; and when the sensorium is in a heightened state of activity, the disease is fully developed.

Hence sleep, which is the suspension of the sensorial powers, even when artificially obtained, effects the cure of this disorder, in the same way as natural sleep operates in ordinary and occasional intoxication.

It is said, that this affection has been known to be induced in persons of sober habits, whose daily occupations exposed them to the absorption of the vapour of alcohol. M. Léveillé alludes to several instances of its being so produced.

Other foreign authors notice a similar effect from sudden abstinence in those who have been long accustomed to habitual intoxication from drinking spirits.* Dr. Wendt, of Copenhagen, recites the cases of two drunkards confined in prison, who, from being suddenly reduced to bread and water only, were seized with the symptoms of delirium tremens. Dr. Bruhl Cramer, a Russian physician, published at Berlin, in 1819, a tract upon insanity caused by the sudden deprivation of alcohol.

The delirium so produced has been called by M. Rayer, *anomanie*, and by Professor Hufeland, *dipsomania*.

The patients are furious and delirious when spirits are withheld, and calmed when it is administered. Hufeland thus describes dipsomania:—particular mobility of the nervous system, lassitude of the limbs, various delusions of the external senses, sensibility of the optic nerves altered, trembling of the hands, and great fear.

* Hufeland's Journal, Oct. 1821.

This malady, Hufeland says, is consequent to the former, is provoked by alcohol, and is fixed in the abdominal viscera. There is fever, with cholicky and other disagreeable sensations in the belly, which do not attend on primitive delirium tremens. It is, therefore, purely a symptomatic affection. This physician advises emetics as a cure; but L  veill  , and the others mentioned as having met with it, prefer wine or spirits in moderation, and opium.

Dr. Coates, of Philadelphia, in a recent essay on this peculiar affection, has pronounced as an aphorism, that the patient must "sleep or die," and that there is no alternative.* This postulate, however applicable to the disease as it presents itself in America, cannot be admitted as strictly applicable to the cases of it which we meet with in England. Probably, the greater facility with which ardent spirits are procured in America, invites to much greater excesses than are met with in Great Britain; and hence the cases are generally far more intense and fatal. Unquestionably, sleep is the natural solution of this malady, as it is of intoxication from wine; but I have seen many cases of delirium tremens continue several days, and where, when sleep came on, it was from the subsidence of the symptoms, unaided by narcotics of any kind. The cure, therefore, was not the effect of sleep; but sleep was the natural effect of diminished excitement. Thus far, however, I can confirm this physician's opinion: — I have seen death ensue from the withholding of narcotics till they were too late to arrest the fatal event.

Treatment of Delirium Tremens.

Not to interrupt the subject, I shall here offer some remarks on the treatment of this affection.

* Lond. Med. Repos. vol. xxix. p. 182.

There is still some diversity in opinion respecting the remedial plan to be pursued. Georget says, that such cases may be cured quite as quickly by diet, diluents, and quiet, as by giving one or two drachms of laudanum daily, as he has seen practised by Esquirol in La Salpêtrière.*

I have treated such patients by opiates, and without any narcotic at all; and they have by both modes recovered in the time this disease usually occupies. Formerly, if the constitution were not broken down by a long-continued habit of intoxication, but, on the contrary, appeared rather full, I prescribed blood-letting from the arm; but never finding any corresponding benefit, I long since ceased the practice. Afterwards I tried abstracting smaller quantities of blood from the occiput or nape of the neck, by cupping; or from the temples, or behind the ears, by leeches, in order to reduce the cerebral action; and applied an evaporating lotion to the head. Moderate depletion and cooling applications will generally relieve and refresh a vigorous young patient; but must be cautiously adopted if an old one. As the bowels are often constipated, and the secretions bad, moderate purging is almost always indicated.

I have never tried the effect of cold affusions, as recommended by some physicians; but I see no reason why they should not be useful, provided the constitution possesses sufficient vigour to produce that reaction in the capillary system upon which depends their utility. Sudden immersion in cold water will instantly recover the senses of one in a state of intoxication; but the condition of the system may be very different in an occasional and an habitual drunkard: in the one, such an application might produce a salutary action, which would restore the equilibrium between the

* De la Folie, p. 237.

vascular and nervous systems, and chase away the delirium; in the other, a dangerous state of collapse might follow.

But the first and most essential duty, upon being called to a patient with delirium tremens, is to ascertain to what extent his previous habits of drinking have been carried, and how far his constitution has suffered, and to prescribe accordingly. If, as I have said, the constitution be little impaired, and the symptoms of cerebral excitation run high, very moderate depletion by cupping, and purging, and the antiphlogistic diet, may be premised; and the exhibition of opium, in such doses as will induce sleep, should follow. If, on the contrary, the patient is advanced in years, and is a confirmed bibber, abstraction of blood should be avoided; his bowels should be merely kept soluble; a little spirit or wine, diluted with water, and light nourishment, be allowed; and he will require larger doses of opium before sleep can be produced.

Even if opium do not procure sleep, yet there is this decided advantage from its exhibition—a state of quietude is obtained, equally desirable for the patient and his attendants.

The quantity of opium to be given must be regulated by circumstances. I generally prescribe three grains in the first instance, and continue it in smaller doses every hour or two till sleep is obtained; and these doses have sufficed. Calomel with opium, as recommended by Dr. Armstrong, is a good combination; but I prefer first emptying the bowels by a common purge, or by a purging clyster, as the readier way of accomplishing that object.

As this species of delirium in America appears to be of a far more formidable character than in this country, so likewise do the doses of opium exceed what we are accustomed to prescribe for it: they are indeed marvelously large. Five or six grains at a dose, we are told, are

an absolute nullity, and will not drive away a single delusion. Doses from twelve to thirty grains are given with impunity; and as sleep is to be procured at all hazards, "we must go on exhibiting opium," says Dr. Coates, "in considerable doses, at such short intervals as are sufficient to permit its accumulation in the *primæ viæ*, until enough has been taken to produce sleep;" and, finally, he adds, there is no case on record in which any injury has been sustained by such treatment. In one case, 400 drops of laudanum were administered in five hours.

The greater facility of procuring it, and the notoriously deleterious properties of American spirit, may render the cases occurring in that country of a more exasperated character than in England, and therefore may require more powerful doses to oppose their effect. But I suspect that the same object would be gained by smaller quantities of opium; for the effect of remedies does not always correspond with the dose given.

Although indulgence to excess in potations of alcohol be an exciting cause of delirium and madness, yet we find that it may be imprudent, even in the curative treatment, suddenly and altogether to withdraw it from the habitual drunkard.

When delirium has been induced in certain drunkards by sudden deprivation of alcohol, to give a little now and then is sound practice; and this ought to be remembered in the treatment of temulent delirium.

Upon the same principle, camphor, which is an excitant, has been given with great success to remove the exhaustion and delirious despondency of habitual drinkers.*

In the remedial treatment of any form of insanity originating in this vicious habit, the caution of Sydenham, in regard to the mode of treating those who have much

* Journ. Gén. de Méd. tom. lvii. p. 238.

indulged in spirits when attacked with peripneumonia notha, applies, — *i. e.* not suddenly, and wholly to restrict them from the use of spirits ; or at least, that depletion is unsafe in such constitutions.

Vomiting I have tried without benefit. Vesicatories to the nape of the neck or upon the head, which are too commonly resorted to, are decidedly injurious. They always increase cerebral irritation.

After the delirium ceases, the patient is generally left much debilitated. I have seen dropsy very soon succeed. Some bitter tonic is then of great benefit ; and much care should be taken in respect to diet.

There is one other remark I have to offer in the treatment of these patients, and which I deem highly important, that, however furious they may be, care must be taken that too great personal coercion be not exercised. Although very suspicious, they are remarkably susceptible of soothing language and kind attentions ; mildness, therefore, will often accomplish what rougher modes will not. Persons against whom they entertain any prejudice, however intimately connected, should keep out of sight : they only irritate, and render them more furious.

This advice applies of course in the management of all deranged persons, but it more particularly relates to these patients, for they cannot bear much bodily exertion. They are often apt to sink suddenly into a state of exhaustion. I was called one morning early to visit a stout, respectable tradesman, who had been some days labouring under this malady. He had been violent at the beginning of the preceding night, and not being under proper care, half a dozen ignorant men had been employed all night in controlling and keeping him in bed. This irritated him exceedingly. When I visited him I found he had been vociferating, and struggling for hours with these people, who he conceived were endeavouring to murder him. He was in a dreadful state of excitation

and exhaustion. Upon ordering every person out of the room except a female servant, and soothing him, he became quite calm, was grateful to me for his deliverance, and took from my hand nourishment, which he had before resisted. From the report of his apothecary, there had not been previously the slightest symptom of danger in his case, nor did I suspect any at the moment. The contest, however, proved fatal to him; for he sank in less than an hour after I saw him. Upon examination of the cranium, a few hours after death, proofs of venous congestion were very evident; and there was a great effusion of serum into every part of the encephalon. It is not improbable that this unusually great effusion might be caused by the excitation and severe struggle which the improper management of him produced.

Even the restraint of a strait waistcoat is seldom required; and frequently nothing more is necessary than confinement of the patient to his room, with a judicious attendant, who will not regard a little blustering violence, so long as it stops short of overt acts of mischief.

Many attempts have been made to describe the difference between the diagnosis of maniacal and of acute delirium. Georget, impressed with the importance of such distinction, has, in parallel columns, contrasted the characters of each. The design, if not perfect, is laudable, and may be useful. Imitating his example, therefore, I shall subjoin a comparison, adding some distinctive signs which he has overlooked, and which, I think, still more clearly discriminate the two affections.

The difficulty of an accurate demarcation between the diagnosis of insanity and delirium must be confessed;—nor do I presume that I have here succeeded in overcoming it. Perhaps it is insurmountable. Yet, imperfect as this attempt is, attention to the opposite signs of

the two affections may prevent the delirium of insanity from being confounded with, and mistaken for, a symptom of an acute disease ; and acute delirium for an accession of insanity.

DIAGNOSIS OF MANIACAL AND ACUTE DELIRIUM.

Maniacal Delirium.

1.

Intellectual disorder constitutes essentially and exclusively insanity.

There is little or no pain in the head.

2.

Insanity is both active and chronic.

3.

The understanding is rarely entirely lesed : one or more of the intellectual faculties are altered or deranged. The senses, separately, are sound. If sometimes the patients distinguish incorrectly, yet at least they perceive ; if they err in perception, it is accidental.

There is ordinarily an excess of action, and a deviation, or false direction, of the intellectual faculties.

Maniacs will hold a connected and well-supported discussion. They possess a strong will, and offer motives for their actions. Frequently, when reasoning, they err only in their premises ; whence follow false conclusions.

4.

The insane generally preserve a

Acute Delirium.

1.

Acute delirium is a symptom only, which does not even characterise the disease on which it depends, nor determine its return.

Intense cephalæa often attends.

2.

Chronic delirium cannot exist, because chronic delirium becomes insanity.

3.

Delirium consists in an abolition, rather than a deviation or defect, of intellectual harmony.

The sensations are imperfect, or are even wanting. The affective faculties are extinct ; the power of reasoning is lost. The patient speaks commonly unintelligibly, or without connexion ; his words and actions are without relation to surrounding objects ; both appear automatic. Volition and consciousness, even of existence, are gone. In low delirium he is almost always yawning or sleeping, and appears to awake when he makes an intellectual effort.

4.

When recovered, the patients

Maniacal Delirium.

recollection of all that has passed during their malady.

5.

The brain, as the nervous centre, is ordinarily but little altered : this is the reason why all the other functions do not prove so much deranged, especially after the period of excitation. The voluntary movements are not at all altered ; the patient runs and walks at his ease, except paralysis supervenes. The digestive powers are not always defective.

6.

The intellectual organ, primitively affected by certain causes, is first deranged ; so that disorders of the other organs are sympathetically involved from the cerebral affection. Insanity is then an idiopathic affection. The intellectual disorders are essential, since they alone, or nearly, constitute the disease.

7.

The causes of insanity act directly upon the intellectual functions of the brain.

8.

The delirium of insanity persists when the exciting cause has ceased.

9.

The duration of insanity is very variable. When incurable, it may continue many years, or for life.

Acute Delirium.

recollect in the slightest degree very few of the circumstances which have occurred in the course of their delirium.

5.

The brain is violently affected in all its functions ; there is likewise great disorder in all the organs : the movements are quicker, or there is continued agitation, convulsive actions, &c. All in acute delirium are bedridden. The stomach scarcely bears even the lightest liquids.

6.

Delirium is never primitive. If it be not sympathetic from an action of a remote organ on the brain—if it do not depend on an idiopathic affection of the brain, still it is always preceded by the development of other symptoms. We must then often regard it as sympathetic, and always as secondary.

7.

The causes of delirium are either from remote diseases, or from different influences, which give birth to cerebral affections, of which this is the symptom.

8.

The delirium of all diseases, except insanity, ceases with its cause.

9.

Acute delirium being nothing more than a symptom, its continuance is limited by that of the

Maniacal Delirium.

The insane are rarely cured under some months, or one or even two years.

10.

Insanity does not kill of itself; but it tends to shorten life, and renders the event of any other disease attacking an insane person more hazardous; and it is often incurable.

11.

Insanity is often hereditary. Nine-tenths of the insane are influenced by predisposition; and most announce very early in life, by the characters of their minds, that they are predisposed to the development of this malady.

12.

The cure is not always durable; relapses, or recurrences, are frequent; and the brain is easily disturbed by slight causes.

13.

Maniacal delirium never occurs in childhood but as exceptions to the law of nature.

Acute Delirium.

disease which produced it. It cannot continue long in an equal state of severity; a return to health, or death, must quickly terminate it. The delirium may continue some hours, or some days; but it is rarely prolonged more than twenty or thirty days; and if so long, generally terminates in mania.

10.

The diseases which produce delirium are often mortal; but if they are cured or diminished in intensity, the delirium does not survive them.

11.

Acute delirium is no more hereditary than the diseases of which it is but a symptom. Often it is not till the moment it breaks out that we descry it; rarely, at least, is it many hours in advance of the disease.

12.

When once the health is well established, a relapse is not to be dreaded; for it is not easier to contract a new disease than the first one.

13.

Acute delirium is common to every age, from infancy to senility.

COMMENTARY V.

STAGES OF INSANITY.

Nothing in the pathology of insanity has tended so much to improve the medical treatment of it as the division of this disorder into distinct stages or periods. Other diseases, which are properly called acute, if not interrupted, have their incipient stage, and, in succession, those of intensity and convalescence. Such diseases also may assume a continued remittent or intermittent form. So likewise may insanity. Thus far, then, the analogy of insanity and acute diseases holds,—but no further; for though the former be an active disease, inasmuch as it runs through distinct stages, it cannot, in the sense in which acute is applied to other diseases, pretend to that character.

There is also a precursory state which indicates the approaching malady.

Insanity, when it has arrived at, and proceeded through, the incipient and intense stages, and the convalescent does not succeed, passes into the chronic stage, and thence into the permanent or incurable.

Insanity, therefore, I would say, is active and chronic, having successive stages of incipency, intensity, and duration.

For the philosophic division of insanity, as a corporeal disease, into stages or periods, we are indebted to the observation and discrimination of the celebrated Pinel;* and it has been recognised by his successors.

Where even no hereditary predisposition exists, still

* *Traité*, &c. ed. 2nde, p. 139.

there are visible peculiarities in the constitution which indicate aptitude to insanity, either in the form of mania or melancholia. Those of the sanguineous temperament, who are prone to excessive spirits, warm feelings, great irritability, and sudden passion, incline to the former; those of the opposite temperament, who are highly nervous and susceptible, dyspeptic, low spirited, vaporous, timid, and indecisive, incline to the latter.

Either of these forms of insanity may originate in the opposite temperament, though rarely; and, as has been often noted, and ought not to be forgotten, they are ever varying, intermingling, and alternating; so that no portrait is long a faithful resemblance; and we are sometimes perplexed to decide whether mania or melancholia will follow. Indeed, the physical or corporeal symptoms of both are very analogous. The difference is greatest in the mental or moral characters. This is a truth to which I strongly invite attention, for the basis of the curative plan rests upon the knowledge of it; and it is a conviction which has been too long deferred.

Although we possess so many elaborate definitions and descriptions of the symptoms of actual mental derangement, yet few embrace the precursory symptoms. Hence those preventive measures, which a knowledge of them might suggest, are wholly neglected.

When the previous history of a case of insanity is detailed, every physician must find frequent cause to lament that he has not been earlier consulted; for the precursory symptoms generally are so fully described, that it is no presumption to conclude, that the application of timely remedies would often have prevented the full development of the malady.

Georget, in adopting the division originating with Pinel, has portrayed the respective stages of insanity with fidelity. Perhaps he has refined too much, and descended to a useless degree of minuteness in his division of the

subject. Nevertheless, his descriptions may be studied with great advantage.

Convinced that these stages or periods do present themselves, and that the neglect or oversight of this scientific view of insanity is the principal cause of the confusion, vacillation, and frequent disappointment in the remedial treatment of it, I shall not hesitate to follow the example of the French pathologists, and describe the successive periods into which the disorder divides itself, and should be studied.

As the symptoms which denote insanity are both mental and corporeal, and are too much blended in all diagnostic descriptions, I shall endeavour to notice them apart. The stages or periods to be traced in this malady may be thus arranged : 1. the *Incipient* ; 2. the *Active* or *Confirmed* ; 3. the *Decline* and *Convalescent* ; 4. the *Terminations*. The last subdivides into, 1. *Recovery* ; 2. *Relapses* and *Recurrences* ; 3. *Incurability* ; 4. *Mortality*.

Precursory State.

The physician has seldom an opportunity of observing the signs of threatened insanity. We may collect, however, that the first indications, though sometimes insidious, mark a decided change in temper, thought, manners, or habits, or derangement of some important bodily function.

It is true, insanity, comparatively, is a rare disease ; and as the precursory symptoms of corporeal derangement are rather latent than apparent, medical advice is therefore rarely resorted to till the disease is advanced. A mere change in manners or habits, or even some degree of eccentricity, excites no alarm, till the explosion, perhaps of mania, discloses the startling fact. If proper preventive means have not been applied at this period, the error is in the misjudgment of the patient's associates, and not in his physician. Sometimes the premonitory

signs are so unequivocal, that little experience is required to prognosticate the coming storm; and still they are disregarded.

Mania sometimes explodes with scarcely any previous notice. This is generally the effect of some sudden and violent moral impression, or of a relapse or recurrence of a former attack. The delirium of inflammation or fever, or of the sympathetic action of some remote organ, is more apt to come on rapidly than true maniacal delirium. Melancholia is commonly slow in its development, and insidiously glides from nervous apprehension and low spirits into despondency, despair, and illusion.

The knowledge of an hereditary predisposition, or of a highly nervous and excitable temperament, should put every one on his guard against the possible occurrence of insanity; and when there are particular or sudden deviations in the physical and intellectual characters of such individual, there is always cause for alarm.

The best excuse for an oversight of this description is, that these changes usually take place very gradually; sometimes occupying a year, sometimes only a few months, but oftener a few weeks. But where the exciting cause is sudden and sufficiently powerful, the access of insanity may occur in a few days afterwards, or be almost coincident with it.

The physical changes, indeed, are often very obscure, and not easy of detection; the moral or mental are more obvious, but sometimes so slowly developed, that although a difference in character is perceived by those in common intercourse with the patient, yet, from unwillingness either to acknowledge or confess even to themselves the fact, they are suffered to proceed till too late to be controlled.

The form of the malady is strongly influenced by the constitution or temperament, and the remote causes;—in the one case inducing uncommon elevation of spirits,

foreboding mania; in the other, depression and despondency, foreboding melancholia.

When, however, the natural disposition is sensibly altered, and, without apparent reason, the gay become sad, the serious merry, the taciturn talkative, and the talkative silent; the prudent negligent, extravagant, and speculative, the generous penurious, the religious indifferent, the indifferent suddenly religious, the modest and chaste obscene, the active indolent, the listless endowed with unwonted vigour, the bold timid, and the timid bold; — we may fairly infer a still greater change is pending, and that positive insanity is threatened.

1. *Incipient Stage of Mania.*

At first, general high spirits only mark an alteration from the usual character; new ideas, propensities, and passions, are developed; there is an increased rapidity and expression of ideas; every faculty of the mind is exalted, and new ones are elicited never before remarked — perhaps for poetry, music, or declamation — or the arts, as drawing, painting, or mechanics. Every thing is done by impulse, nothing from reflection. Many things are begun and eagerly pursued, but few are finished. Short reveries suddenly interrupted; restlessness and desire of change; quick and hurried utterance; blustering and authoritative, commanding and countermanding in the same breath; passionate and irascible; laughing immoderately, or singing, or shedding tears, and all equally without cause; scheming, ambitious, and extravagant; taking no note of time; negligent of dress and cleanliness; extreme watchfulness (pervigilium) and suspicion; propensity for drinking, or venery; and general agitation.

As the malady advances, the memory experiences sudden lapses, succeeded by vivid thoughts, sometimes pleasing, sometimes horrific; violent sudden laughter, crying, or shrieking; imaginary noises and whisperings;

increased suspicion. All ordinary occupations are executed in a more hurried and less perfect manner, or are wholly forgotten; and there is great confusion of mind, though no positive delusion, hallucination, or delirium, be yet declared.

Usually, the first physical signs of mental derangement are broken sleep and troublesome dreams, slight cephalalgia, palpitation, a sensation of blood rushing to the head, or pulsation at the temples, occasional heat and flushing of the face, slight giddiness, and buzzing noise in the ears. The digestive functions are altered; the appetite is precarious, sometimes increased, sometimes diminished; the complexion changes, and the patient grows thin. The menses become irregular, diminished, and at length often suppressed; sometimes their obstruction precedes all other symptoms. In fact, all the secretions and excretions are gradually impeded and vitiated. There is a marked change in the expression of the features, and the indications of modesty or diffidence, natural, perhaps, to the character of the patient, are now the reverse. The appearance of the eyes is singularly changed. This feature, always perhaps the most unerring index of the mind, instantly betrays, to one accustomed to insane people, an aberration of the intellectual faculties. The eyes at this period are more brilliant and animated than usual, or shining, staring, and protruding.

These symptoms may continue the same for some time; but by degrees they all become aggravated, or fresh ones intrude, before positive delirium is developed. The white portion of the eye (*conjunctiva*) now becomes highly injected or blood-shot; the rushing of blood to the head, and palpitation of the heart, increase; coruscations of red light are seen, as if the eye were struck; or dark substances like flies (*musca volitantes*) flit before the sight. The cheeks are sometimes flushed, sometimes pallid; the tongue streaked like a whitish list down the centre; some

thirst; the pulse quickened, full, and often hurried; a slight degree of heat; scalp hot, and with an indistinct pain or heaviness in the head; appetite very irregular, often voracious, but no attention paid to meals or time.

If these symptoms are suffered to proceed, there is a sense of fulness or distension, or constriction, like something tight bound round the head, or a weight or distinct pain, or stronger throbbing, or rushing of blood, or preternatural heat of the cranium; noises in the ears louder; great quickness of hearing, but attention transitory; vertigo; carotids beating strongly, and perhaps not in unison with the stroke of the radial pulse; bowels inactive. Per-vigilium constant, or if there be a short sleep, incubus attends it.

Sometimes there comes on a sudden redness and brilliancy of the eyes, and perpetual loquacity; or, after intervals of calmness, there is first great volubility, then frequent fits of laughing or crying, and ecstatic visions during the night. When these symptoms concur, they threaten a violent explosion. Sometimes, however, they may terminate in a mild reverie, with extreme confusion of ideas, and an entire subversion of reason.

2. *The Active or Confirmed Stage of Mania.*

The active or confirmed stage both of mania and melancholia have been so repeatedly and accurately described by ancient and modern authors, and their respective characters are so frequently adverted to in the course of this work, that a minute description here would be superfluous. I shall, therefore, be the more brief.

The precursory symptoms described may run on for weeks or months before mania explodes; but it occasionally happens suddenly, and sometimes is a rapid change from melancholia. The active stage exhibits all the incipient symptoms, both mental and physical, but much heightened.

The *mental* phenomena present a greater incoherency of ideas and speech; some positive delusion exists; the patient is very loquacious or vociferous, raving incessantly, or with short intervals, during which, perhaps, a transient ray of reason gleams; or he laughs, cries, whistles, shouts, screams, or howls; is restless, full of antics, mischievous, tearing his clothes, and destroying all he can reach; is malicious, swears, prays, perhaps desperately intent on violence to himself or others; is lecherous, obscene, shameless, nasty, and indifferent to the calls of nature. Sometimes he evinces great anxiety, distress, fear or horror, suspicion, and revengeful feelings. Even in this stage of mania, they are cunning, acute, witty, and often capable of writing with correctness and taste, or of executing mechanical arts; and yet the faculty of perception, and sometimes of judgment, or both, are, as to particular objects, lesed. But, in the furious form, all the faculties seem implicated, and there is too much impetuosity, incoherency, and confusion of thought, to be competent to exercise the powers of combination.

The affections are exalted, perverted, or extinguished: occupied by one or a great variety of subjects, the patient's inclinations and actions correspond with that impression which predominates.

The *physical* phenomena present the nervous sensibility greatly augmented or diminished. The muscular powers are increased, and in a degree immensely disproportionate to the apparent natural powers. The temperature of the skin is heightened, sometimes generally, sometimes partially; but there is no pyrexia. Fever, however, is often inferred, because there is increased heat; but this is to be imputed to the immense muscular force and exertion the maniac uses, and not to febrile excitation; the head is often preternaturally hot, while the skin or extremities are cool; the throbbing and noises in the head, and beating of the carotid and temporal arteries,

are at times greater, and are visible to the sight; radial pulse exceedingly variable; pain in the head is rather inferred from position or movement of the patient, than from direct complaint. Sometimes acute pain seems indicated by the patients jumping up suddenly with a loud shriek, applying their hands to their heads and rubbing them, and then running about, and talking to themselves. The features are very mobile, and the cast of them strangely altered; the complexion often very pallid, sometimes assuming a brownish or lead-like colour; the face occasionally looking greasy, and, when there is an exacerbation of excitement, flushed; the eyes are then more prominent and shining, often fierce and menacing, and the eyelids retracted, shewing a white circle round the cornea. Frequently the direct rays of the sun are borne with a steady, unblinking gaze; sometimes light is a source of great irritation. When quiet, the eyes sunken and hollow; often a moisture about them, and a thick rheum adhering to the eyelashes. Much sordes about the lips and teeth. The breath often strong, offensive, or fishy. Sometimes profuse ptyalism or mucus, like inspissated lymph, is ejected from the mouth and fauces in small spats. The skin commonly dry and harsh, and occasionally emitting a peculiar fœtor, by which alone those acquainted with it may easily distinguish a maniac. The tongue foul, sometimes covered with a bluish-white list down the centre, the edges being red, moist, and frothy; and with this appearance of the tongue, occasionally considerable thirst, arising commonly from incessant babble. Appetite depraved, much flatulence; stomach often loaded with an exceedingly tenacious phlegm, and obnoxious to the action of the most powerful remedies, such as emetics and purgatives. Bowels costive and difficult of action. Secretions and excretions usually either increased or diminished, and generally vitiated and smelling offensively; urine high coloured.

Perhaps no sleep, or very short, and disturbed by frightful dreams. The body grows more meagre.

Sometimes, however, intellectual disorder arrives at the confirmed stage with scarcely an indication of functional derangement. But in such case, an hereditary diathesis certainly prevails. It is then an idiopathic affection.

This condensed enumeration of the ordinary phenomena is sufficient to characterise recent mania. Something more marked seems, however, required to distinguish it from acute inflammation of the substance of the brain, or of the membranes which envelop it. For nothing is more common than for an attack of furious mania to be mistaken for cephalitis or meningitis, or the reverse; and I have not unfrequently seen delirium tremens confounded with either. I need not expatiate on the disgrace such errors reflect on medical science, nor on the dangerous consequences which must inevitably result from them.

There is no method so effectual either to prevent or correct an erroneous diagnosis of two diseases, as by contrasting the symptoms which distinguish one from the other. I shall, therefore, place the principal phenomena which characterise both mania and cephalitis in parallel columns, as I already have the opposite symptoms of maniacal and acute delirium. Except delirium tremens, there is no other disease with which these can be confounded; and that can generally be distinguished by its exciting cause—habitual drunkenness; though it should not be forgotten, that excessive intoxication has been known to produce encephalic inflammation.

DIAGNOSIS OF MANIA AND CEPHALITIS.

Mania.

1.

The paroxysm preceded by a gradual change of disposition and habits, high spirits, rapid ideas,

Cephalitis.

1.

The paroxysm preceded by sudden and violent pains in the head, back, or limbs, and rigors.

Mania.

incoherent conversation, and symptoms of corporeal disorder. Head-ach, but not intense.

If the paroxysm be abrupt, usually the effect of some strong moral cause.

Delirium partial.

2.

No fever; and when the skin is very hot, it is from violent muscular exertion. Tongue white and foul, but moist.

3.

Pains in the head after the paroxysm rather inferred than complained of; but sometimes partial pain is mentioned.

Stomach insensible.

4.

Head occasionally very hot, while the skin is generally dry and cool.

5.

Face flushed at intervals, but often exhibiting a remarkable pallor.

6.

Features contracted, mobile, and expression varied; though maniacal, delirium not increased.

7.

The eye prominent in the paroxysm only, shiny and menacing, and somewhat blood-shot.

Tears seldom shed.

Cephalitis.

Is usually the effect of sudden cold, insolation, or some strong stimulus, as alcohol, &c.

Ideas often at first vivid.

When delirium attends, it is complete.

2.

Vehement fever; and constant burning heat of the skin, and all the other symptoms of pyrexia. Tongue parched, at first red, then whitish yellow, or black.

3.

Excruciating pain first in the neck and occiput, and then in the whole head.

Nausea and oppression of the stomach.

4.

Head always intensely hot, and the skin, though generally dry and burning, sometimes sweats from every pore, especially about the head, neck, and shoulders.

5.

Face always extremely flushed, and of a deep red.

6.

Features swollen, less mobile, wild and ferocious, and expressive of intense suffering; delirium very high.

7.

The eye as if starting from the socket, always very red, fierce, sparkling, and agitated.

Tears sometimes flowing involuntarily.

Mania.

8.

Gaze at the noon-day sun without blinking, and indifferent to sounds.

9.

Radial pulse sometimes quick and strong, sometimes natural, but generally variable, and not always corresponding with the stroke of the carotid and temporal arteries.

10.

Preternatural muscular force, and exerted for days, weeks, or months.

11.

Respiration natural and easy.

12.

Deglutition free.

13.

Delirium may be violent or mild, constant or with intervals; one or more of the intellectual faculties, but not all of them, deranged. Things are seen in their proper light; but the conception of them is erroneous.

14.

Duration, indefinite.

15.

Prognosis—Recovery, or permanent mania, melancholia, or fatuity: rarely immediately fatal.

Cephalitis.

8.

Intolerance of light and sound.

9.

Radial pulse small, hard, and exceedingly rapid, sometimes strong; and carotid and temporal arteries beat violently.

10.

Muscular force at first greatly augmented; but the patient, though restless, soon loses strength, and finally, in a few days, great prostration.

11.

Respiration very deep, interrupted by hiccough; and towards the end, if fatal, there is a continued puffing of the breath, or blowing.

12.

Deglutition difficult.

13.

Delirium furious, and like that of fever; violent raving, more like passion; complete confusion of all the intellectual faculties; and things not present appear to be so; finally, stupor and insensibility.

14.

Duration, rarely beyond the seventh day.

15.

Prognosis—Generally fatal: if protracted beyond a fortnight, commonly ends in permanent insanity, in some of its forms.

3. *Incipient Stage of Melancholia.*

Dejection of mind and constant sadness being always a precursor of this malady, it is apt to be imputed to grief; and if no occasion be known for it, then to some secret or other depressing cause. Grief certainly is a frequent moral cause of melancholia; but where it is so, it is often owing to an hereditary predisposition, or the person is of the melancholic temperament. Grief or sorrow, however intense, in most constitutions, by degrees subsides without injury; but if continued a long time, it will produce great disorder both of body and mind, and originate a degree of melancholy which deteriorates vital energy, and brings on gradual decay, though without delirium; and the patient in a few years dies quite exhausted. In others, such a state of abstraction follows grief, that all external impressions which disturb the thought associated with the cause, excite a temporary painful sensation and mental irritation, more insupportable than the cause of grief itself. This alternate state of abstraction and irritation, at length effects a total change in the feelings and mind, and all the incipient symptoms of that mental affection denominated melancholia are gradually unfolded.

Persons of the melancholic temperament, it has been remarked, have the venous system largely developed; the veins, especially of the hands and arms, are large; and there is great susceptibility of the nervous system.

Melancholia will arise without reference to any moral cause.

The physical phenomena which precede this affection are not so dissimilar to those which announce mania, as their respective characters, when matured, would lead us to expect. We must seek in the mental phenomena the features that constitute the difference. Melancholia

will even commence with symptoms of considerable mental excitation and violence, though eventually they subside into those of an opposite character.

By referring to the precursory physical symptoms of mania, a sufficient knowledge will be obtained of those which threaten melancholia.

From whatever remote cause this affection proceeds, before any specific hallucination is developed, the patient manifests great susceptibility and nervous agitation, lowness of spirits, and groundless apprehensions; is anxious about trifles, sighs deeply, and perhaps sheds tears. He falls into long reveries, with look fixed on vacuity; neglects all former favourite pursuits, seeks solitude, and shuns intercourse with his nearest and dearest friends. The affections are perverted or blunted; the temper becomes querulous, passionate, and suspicious; he prefers reading books of a gloomy cast, and if treating of religious subjects, he is apt to identify his imaginary sins or misfortunes with particular passages of Scripture; he mutters to himself, but is more inclined to silence; is indolent, and difficult to rouse from bed; negligent of person and dress; sleep short, but not so disturbed as when mania is threatened. There is a sense of weight about the stomach, præcordia, and head; sometimes erratic pains are complained of; there is much indigestion, and flatulence with offensive eructations; and the bowels are disposed to be constipated. Melancholics are much addicted to biting their nails, picking their fingers, or any pimple or abrasion of the skin, till the parts are often very sore, though the pain attending is unheeded. These habits they are generally most intent upon when conversing or vexed.

While the symptoms are thus gradually developed, the patient appears as if enduring some internal conflict, to suppress the impulse which may betray his mental aberration. He generally entertains a conviction or sus-

picion of the nature of his malady, which he carefully conceals: a delusion therefore may long be generated before it is exhibited.

Perhaps incipient melancholia was never more correctly depicted than in the poet Cowper's memoir of himself. He there singularly illustrates, by his own example, both the propensities and development of this affection. The supposition that a letter he accidentally read in a public journal alluded to circumstances which then particularly engrossed and agitated his mind, is truly descriptive of that suspicion which is so striking a characteristic of the disease.

In a sudden access of mania there is no disguise: impressed with the reality of the delusion, it is boldly urged and maintained, and the maniac repels with fury and scorn all attempts to convince him that it is an error.

In melancholia the delusion is secretly, perhaps, but not less obstinately, cherished; and opposition to it will often induce violent anger.

The particular hallucination of the melancholic is oftentimes inferred from the expression of the features and his actions, long before it is declared. By degrees, however, words are dropped, which discover the character of the delusion. At length it is avowed, defended, and persisted in, as the result of deliberate reflection, or conviction, or inspiration; and his conduct and speech are conformable with the impression.

Melancholia sometimes commences with a paroxysm of furious mania; and mania may begin in melancholia. These may interchange or alternate, or either may preserve its pristine character throughout; thus proving their identity and origin from a common stock.

4. *Active or Confirmed Stage of Melancholy.*

All the symptoms, mental and corporeal, are aggravated. One or several delusions are apparent, though

sometimes withheld ; reveries are longer, and abstraction more intense. The patients are often quite taciturn, or disposed to speak only on the subject of their delusion ; greater dejection, sometimes merely desponding or despairing, inclining to suicide or homicide ; very suspicious, especially of conspiracies against them, or of poison. Morose, misanthropical, obstinate, vindictive, or covetous ; often obnoxious to food of all kinds, and also to medicine, which they loathe as poison, or refuse out of perverseness, from a sense that it is meant for their benefit ; watchful, and in great confusion or terror when waking from sleep ; dreams distressing ; sometimes sleep little disturbed ; great hebetude and indolence, and difficult to rouse ; indifferent to the calls of nature, and void of shame.

The physical symptoms denote determination of blood to the brain ; heat of the head ; the vessels of the conjunctiva injected with blood, and often tinged with bile ; skin cool ; extremities generally cold ; pulse variable, but slow, though sometimes strong, sometimes weak ; complaint of pain, oppression, tightness about the hypochondria, or of a motion thereabouts. Body retains its plumpness ; but as the appetite is generally greatly depraved, and the powers of digestion and assimilation are deranged, or the patient will not take sufficient food, emaciation comes on. Stools dark and very offensive, and often exhibit scybala floating in black bilious fluid ; urine small in quantity, acrid, and yellow ; after a time, marks of great debility. The complexion is still more changed ; great torpor of the intestinal canal ; ptyalism often abundant ; faculty of hearing perhaps perverted ; hence he fancies strange whisperings, or loud noises or voices, proceeding from invisible or concealed beings, or from his own body, or from particular places. Sometimes even before delirium is developed, besides the hearing, some other of the external senses is altered, depraved, or abolished : the sense of touch is occasionally so much

alienated, that the size, weight, or form of substances is mistaken, as in acute delirium.

The affections are commonly, but not always, blunted; sometimes they are entirely perverted, and that person to whom they were before most attached, becomes the object of their hatred. Sometimes they are so wholly absorbed by one or more delusion, as to be almost lost even to animal instinct and to the functions of automatic life.

After a persistence of some days or weeks, the symptoms of corporeal derangement which accompany the incipient and active stages of melancholia, may wholly disappear; but the mental derangement, even with the same delusions, continues. Such change by no means announces convalescence. On the contrary, should the mental disorder preserve its character after the corporeal functions and personal appearance of the patient improve, a long continuation of the malady may be anticipated. The complaint sometimes wears itself out. A visible corporeal improvement, however, generally precedes recovery.

5. The Convalescent Stage.

Although mania and melancholia are generally considered and treated as two distinct maladies, yet, as I have observed, they have the same common origin, of which they are mere varieties. It may be seen in every attempt to trace the diagnostic signs of each, how difficult it is to draw a distinct line between them, from their liability to intermingle and shift one to the other. So, likewise, in the convalescent stage of both affections we recognise their affinity. Indeed, it were superfluous to attempt separate descriptions. The accession of fever, the return of a suppressed natural evacuation or cutaneous eruption, hydropic accumulations, spontaneous hæmorrhages or diarrhœa, ptyalism, the discharge by

derivants, &c., are equally favourable, whether in a case of mania or melancholia, and sometimes effect a cure. Hence it is obvious, that to particularise the approach of convalescence in the former, is to describe it in the latter.

The violence or intensity of either affection sometimes merely subsides for an indefinite time, and recurs with greater force than before. The longer, however, the intervals of quiescence in mania, and revived attention in melancholia, the more favourable to convalescence. But sometimes the subsidence of violence indicates only a change of the malady, and despondency and apathy may follow; and sometimes the patient glides into a chronic state of mild mania or deep melancholia, or from melancholia into fatuity; which several conditions may continue with little variation for unlimited periods.

Nevertheless, it occasionally occurs, that the abatement of violence, or sudden emerging from despondency or fatuity, immediately announces convalescence. Therefore it is often very difficult, indeed impossible, to draw the line between the decline of these attacks and the commencement of recovery.

Certain changes usually first take place in the physical state of the insane, which denote improved health. These are, perhaps, very obscure, and not perceptible by the ignorant. A correspondent amelioration of the mental faculties ought at the same time, or very soon after, to follow. If the condition of the intellectual powers improve with those of the corporeal, convalescence is announced; but if the latter amend, and the former remain as they were, we cannot pronounce the patient convalescent; but, on the contrary, have reason to fear that the malady will be permanent or long continued. If the mind improve, and the body continue in a great state of emaciation, or a condition not natural to the patient before he became insane, then there is little confidence in the stability of the amendment.

The most satisfactory sign of convalescence, is a return of natural affections. The patient asks slight questions in reference to some dear object; at first hesitatingly; he is soon more urgent and pointed in his inquiries; or, under some new emotion, he is seen to shed tears, or betray other right feelings, and these feelings are developed more slowly or rapidly, as convalescence advances; or the patient is observed to pay attention to different objects, such as personal appearance, dress, &c. and especially to his fellow-patients, whom he before disregarded or shunned. Such proofs of returning feeling and reflection are at first so trivial, that none but those who are on the watch for these happy indications would remark them.

It will readily be conceived of what importance it is to recovery, that these incipient signs of waking from a long night should be most attentively regarded and cherished. Should they be repulsed by neglect or ignorance, the mind may again be plunged into that disorder whence it is making feeble but sure efforts, if encouraged, to emerge.

The delirium generally passes away by degrees. Rational ideas recur only at uncertain intervals, and are fugacious; or there is a weakness of intellect, incapable of carrying on the catenation of thought and reasoning. Many things suggest themselves, but having no self-confidence, there is an infirmity of purpose. The patient appears to make efforts to recall objects and circumstances, past or suspended during a long estrangement of memory, and recalls them with such various feelings as they are calculated to awaken. Above all, he is usually much occupied with the painful reminiscences of his now fleeting malady, which appears to him like a fearful dream, the images of which, on being first awoke, are still so impressed, that whether they are real or false, they create doubt and dread.

The delirium belonging to mania may disappear suddenly, or be much diminished; but still the ideas continue for some time unsettled and flighty. The gloomy delirium of melancholia declines usually more slowly; and the return to reason, though not so apparent, is more uniform. But convalescence in long-continued melancholia is often preceded by a sudden accession of mania, and this is succeeded by symptoms of an improved mind.

Generally, the mind is left much enfeebled, and is incapable for some time of combining the nascent ideas. The patient being doubtful of his powers, his resolutions are dictated rather by caprice than by judgment. Yet I have seen instances of a most perfect restoration of the mental faculties, and that instantly, where mania has continued a long time. A young gentleman, suddenly seized with *mania ferox*, from a gross excess in drinking champagne wine, had continued insane nearly a year, when one evening he addressed a very sensible letter to his family physician and to me, communicating the fact that he had just recovered his senses, and requesting to see us both the next morning. We accordingly visited him together; and, after the strictest examination, could not trace an aberration, or any weakness of intellect remaining. The recovery was complete; and eight years afterwards he continued well. He had undoubtedly previously manifested traits of improvement; but the very morning of the evening on which he recovered, he knelt to me, and kissed my hand, as he had been accustomed to do throughout the whole course of his disorder, from an impression that I was King George.

The return of natural sleep denotes a favourable change. So long as great watchfulness and agitating dreams occupy the place of refreshing rest, the cure is incomplete, and a relapse may be anticipated.

The complexion assumes a healthy hue; and the countenance peculiar to mania or melancholia gradually changes

to its natural expression. The extenuated body becomes plump, and the gaunt and stiffened limbs acquire roundness and flexibility. The carriage is freed from extravagant or constrained movements. The appetite is regular; digestion is unembarrassed; and assimilation, and all the secretions and excretions, are natural. The menses return. In fact, all the bodily functions are re-established. The maniac then becomes calm; the melancholic more cheerful; and both submit readily to rule and regimen.

The decline and final removal of delusions, and return of the wonted faculties of the mind, generally proceed with the improvement of the general health. At length there remain only a little cerebral commotion, with some confusion of ideas, slight headach, or sense of weight. It is not uncommon, too, for the convalescent to complain of pain in the body or limbs; sometimes continued, sometimes fugitive; but if they really exist, they gradually subside. The reassumption of functions by the different organs, muscles, &c., which have been long deranged, suspended, or perverted, may, however, occasion an uneasiness in them in the first instance, which use disperses.

Should the features and the exterior of a patient not resume their natural contour, although the intellectual functions be improved, there will be no stability in the recovery. All the functions and attributes of health must be restored, ere confidence can be placed in recently regained sanity.

It often happens, that as reason dawns, an intense anxiety is expressed to be restored to the intercourse of relations, friends, and society. A very important but painful duty is then imposed on the physician; for such solicitations are difficult to withstand, yet must be resisted till he is convinced that compliance is prudent. To persist and importune for unlimited communication and emancipation, after explanation of the necessity of precaution, and that some limit upon the inclinations of the

patient is necessary, by way of probation, and to ensure complete recovery, augurs unfavourably of the stability of convalescence. On the contrary, where the patient is impressed with the propriety of the reasons, and waits patiently a rational period of probation, much confidence may be placed in the cure.

When the progress of convalescence has been regular, the stability of recovery may be the more confidently relied upon.

Attacks of maniacal, as well as of other kinds of delirium suddenly induced, often subside as suddenly; in which case the functions of health having been little impaired, the recovery therefore may be stable. But when the maniacal action has long continued, some organic or functional lesion probably occurs; and then more time is required for convalescence to ripen into perfect recovery.

Whenever recoveries occur without the usual preliminary stage of convalescence, they are generally the effect of some sudden powerful impression on the sensorium. The unexpected sight of a beloved object, terror, a violent fall, the shock of the bath of surprise, &c., has produced an instant restoration of the senses. In many of these cases, however, there is reason to suspect that the morbid action in the brain was fast wearing away, or, in other words, that convalescence had begun; otherwise these means probably would not have produced this result. When, however, the balance between the nervous and vascular systems is nearly adjusted, the re-action consequent on these sudden emotions doubtless may restore the equilibrium, and establish both the bodily and mental health.

COMMENTARY VI.

PUERPERAL INSANITY.

THERE are two conditions of mental derangement, each perfectly peculiar, but the characters of which are so mixed, that it is difficult to decide whether to consider them as varieties of pure delirium, or as maniacal affections. They are designated *puerperal mania* and *senile delirium*. But the first is certainly inappropriate, since the symptoms developed are as often those of melancholia; and the second is equally so, because the symptoms are often strictly maniacal. The generic, *insanity*, is consequently well suited to both. I shall, therefore, treat of them under the names of *puerperal insanity* and *senile insanity*. The first, from its frequency and importance, requires serious consideration; the second may be more briefly noticed.

Common as the mental disorder is which is peculiar to the puerperal condition of woman, yet our information respecting the origin, nature, character, or treatment of it, is singularly deficient and vacillating.

It will be universally conceded, that there is no form of mental derangement more truly afflicting in its consequences than that which supervenes on the natural processes of gestation and parturition.

Fondly anticipating the joy, perhaps of a first-born, a beloved wife patiently submits to all the inconveniences and restraints of pregnancy, however irksome, and the pains and dangers of labour, however great. The affec-

tionate husband and relatives await with deep and anxious expectation the event; and at length, when the joyful period arrives, and the happiness of all is completed by a safe delivery, — how dreadfully is the scene reversed, when the happy mother suddenly displays symptoms of delirium!

Having early in life been rather extensively engaged in the practice of midwifery, I can well remember, not only the distress such a case occasioned in the patient's family, but the great anxiety it always caused me. I remember, too, when a consultation was held, the little assistance derived from the speculative opinions of some, and the anile prescriptions of others. Hence, perhaps, my attention has been the more forcibly attracted, and my desire to attempt the further elucidation of this mysterious and interesting subject increased.

When mental derangement consequent on the process of parturition or lactation is developed, it is not generally till after such remedies have been applied as may be thought indicated, and no amelioration of the symptoms has followed, that the advice of a physician familiar with mental disorders is requested. Hence the opportunity of seeing puerperal insanity in its incipient stage, as in most other cases, rarely presents itself to him. This, in an affection so active as the one under consideration, is greatly to be lamented, because it is in the first stage that most benefit from remedies is to be expected.

In this respect I have had some advantage, for I have seen several cases through the whole course of the disorder. However, I do not thence presume that my descriptions are more faithful; neither do I arrogate superior success in the treatment of it.

Gestation itself is a source of excitation in most women, and sometimes provokes mental derangement, and more especially in those with an hereditary predisposition. The accession of mental disturbance may be

coincident with conception, and cease on quickening ; or it may come on at any time during pregnancy, continue through it, and terminate with delivery, or persevere through all the circumstances consequent on parturition. Some are insane on every pregnancy or lying-in, others only occasionally.

Whenever mental disturbance occurs during pregnancy, it partakes oftener of an idiopathic character, either in the form of mania or melancholia, than of the delirium which succeeds parturition.

I have seen two cases where hysterical symptoms attended during pregnancy, and the patient almost immediately on delivery became insane.

There is likewise a temporary delirium sometimes accompanying difficult labours, or the fever on the secretion of the milk, or the inflammation of the breasts.

Esquirol speaks also of a sort of frenzy incident to unfortunate girls in giving birth, in misery and secrecy, to bastard children, — a condition of the mind, which, it is to be feared, often prompts either infanticide or suicide.

But I refer here only to those conditions of deranged intellect which supervene on delivery, or on the various processes in the female economy resulting from it.

Sauvages* recognises two distinct species of insanity in puerperal women — *paraphrosyne puerperarum* and *mania lactea*. The former he describes as attended by obscure delirium, recurring at intervals, the lochia continuing ; and that if there be sudden pain in the head, as if from a blow, with aurium tinnitus, or convulsions of the face, it often terminates in carus, or fatal apoplexy. The latter, agreeably to the humoral pathology, he ascribes to a milky deposit on the brain, transferred from the breasts, and that it comes on about the fourth day after delivery, with the milk fever ; but after the fever subsides,

* Nosol. Méthod. Class VIII. Vesaniæ.

the delirium persists ; and from the beginning there is a scarcity of milk and of the lochia. He adds two remarks, which are certainly opposed to modern experience, viz. that it is a rare affection, and commonly incurable. The *mania lactea* of this author most resembles the affection commonly met with in puerperal women ; but his account of it is too imperfect for practical utility.

Delirium sometimes immediately succeeds a natural labour ; or as early as the following day, before the process of lactation can disturb the system ; and the lochia flow uninterruptedly. Sometimes these attacks will go off by the operation of a smart purge and an opiate, and then may be classed with simple delirium. But I have seen all the symptoms of genuine mania or melancholia thus early displayed, and gradually unfold till they have assumed a durable character, in despite of every means to prevent it. More frequently, puerperal delirium comes on about the third or fourth day, as if it were connected with the lacteal secretion ; or it occurs, though not so often, about the 14th or 15th day, which is the average period of the lochia terminating ; or at any time during nursing, or on weaning, whether that be forced or voluntarily. The lochia, however, will flow freely after mania is established, and so likewise in some cases does the milk ; but the latter is not so abundant, and its nutritive properties are always deteriorated.

Sudden cold, which checks the secretion of milk, often originates this delirium. A lady, twenty-one years of age, became suddenly delirious fourteen days after delivery, from cold caught, and consequent retrocession of the milk : a high degree of fever succeeded, which continued for several days, when it assumed the low form of delirium, with muttering, and great prostration of strength, and she died on the tenth day.

Furious delirium will follow excessive hæmorrhage after labour. A lady reduced very much by flooding, upon

some stimulant being given to reanimate her, became very delirious and violent. In this case, however, the cause of the delirium probably was the stimulus given her when in a state of syncope, producing such a degree of re-action as to excite cerebral commotion. This conclusion is strengthened by the delirium ceasing on the third day.

Puerperal delirium consequent on labour is sometimes predicated, though not absolutely developed, during gestation. If while pregnant there attend frequent hysterical affections, preternatural susceptibility, unaccountable exuberance or depression of spirits, morbid aptitude to exaggerate every trivial occurrence and attach to it great importance, suspicion, irritability, or febrile excitation, or, what is still more indicative, a soporous state, with a very quick pulse,—then the supervention of delirium on labour may be dreaded.

The puerperal state is well known to be one of extreme susceptibility; and though there be nothing else remarkable except that the woman has recently borne a child and is a nurse, common sense carefully guards her while she is in that condition against all the incidents to which at any other time she may be exposed with impunity.

The delirium which immediately succeeds delivery resembles pure insanity more closely than that which supervenes on the milk fever; for the skin is usually quite cool, and both the physical and mental symptoms often correspond with the high state of mania. In this case the secretion of milk has not begun; and the lochia are commonly scanty.

The period when the delirium appears is of great importance to mark; for many, without observing any difference, conceive that every attack of puerperal delirium proceeds from milk fever, and boldly prognosticate a speedy termination of it. How can delirium which is developed before, during, or immediately after, labour, originate in the process of lactation?

I have remarked, that when the mental derangement precedes the lacteal process, and partakes strongly of the character of maniacal delirium, that it is apt to persist a long time. When it succeeds the lacteal secretion, which is almost always accompanied by fever, it more resembles pure delirium, and is of shorter duration.

Whenever it degenerates into melancholia, partial fatuity generally attends, and the case is usually obstinate and difficult of cure. It may be noted also, that when the delirium is of a gay character, and the patient sings, laughs, talks wildly, and is a little mischievous, it rarely lasts long; but when accompanied by great suspicion, apprehension of poison, and sullenness, it will not soon depart.

The delirium frequently comes on about the fourth or fifth day, and then it is generally accompanied by a smart attack of fever, which subsides when the secretion of the milk is completed. The delirium also then sometimes ceases, but oftener continues.

Drs. Denman* and Gooch† mention, that puerperal mania is often attended by fever, and the pulse becomes extremely quick; though mania has been defined a delirium without fever.

I do not recollect any case of puerperal mania attended by fever, except when coincident with the first secretion of the milk, or when inflammation of the breasts or other part has occurred, or upon forced weaning when there has been abundance of milk; of which conditions fever is a natural concomitant. The general heat of the body, as Denman remarks, may sometimes be increased; but it is rarely febrile heat, and oftener results from the exertions of furious violence, as we see in ordinary mania. It might prove a fatal mistake to confound this increase of heat with pyrexia.

* Practice of Midwifery, vol. ii.

† Med. Trans. vol. vi.

When the delirium occurs at any subsequent period during nursing, except it arise from a cause suddenly disturbing the secretion and flow of the milk, there are some precursory symptoms which, in a nice observer, would excite a suspicion of its approach. There is a change in temper, an irascibility inducing snappish remarks, and a peculiar hurried manner; sleep is much disturbed, the countenance betrays distrust, the pulse is rapid, and the patients are generally voluble. They often become suddenly negligent of their infant. At length both behaviour and language are incoherent, and delirium is fully developed. Acts of violence, sometimes suicide, are in this stage committed before the nature of the malady is suspected. Symptoms of hysteria often attend the incipient stage.

In a majority of cases, puerperal delirium comes on with the milk fever; especially when, from any accident, the supply of it is not disposed of as fast as it is secreted.

The next period when delirium is apt to arise is about the 14th or 15th day, and generally with the access of it there is a diminution of milk, and a sudden cessation of whatever remained of the lochial discharge.

As a general description of puerperal insanity, it may be said, that although febrile heat of the body be not a usual symptom, yet in the incipient stage, either occasional or permanent heat about the head, and often to an extraordinary degree, attends, even when the surface of the body is quite cool. Indeed, this is sometimes the sole symptom of increased vascular action. But very commonly a partial pain in the head, or sense of pressure, tightness, or uneasiness of the scalp, is expressed; and not unfrequently throbbing of the temporal arteries, noises, &c. in the head. The skin is usually relaxed and moist, especially about the neck. The face is pale, except when there is much cerebral vascular excitement, and then it is

turgid and flushed, and the eyes are red and vivid. The tongue is whitish, sometimes of a brownish white; when the delirium has continued several days, the lips and teeth are often covered with sordes; the abdomen is usually soft, and free from pain on pressure, though occasionally some uneasiness is complained of in the pelvic region; the breasts become empty and flaccid; the pulse is at first quick, small, and weak, but generally, as the malady proceeds, it becomes slower, and I have found it not at all accelerated. There is little or no sleep, and rarely thirst. The action of the bowels is torpid, but they are not difficult to move; the stools are unhealthy, and sometimes horribly offensive. From obstinacy or inattention, not inability to retain them, the patients are often regardless of natural calls. The expression of the features corresponds with the character of the mental derangement.

At first the delirium is commonly that of mania. Occasionally, however, there is a mere childish disposition for harmless mischief, and the patient is gay and joyous, laughing, singing, very loquacious, often inclined to talk obscenely, and careless of every thing around. Even in this state of delirium, she very often evinces a suspicion of poison being instilled into every thing offered; or, perhaps, she imagines it is only in particular things. Sometimes she conceals this suspicion, and then avoids what is offered, upon any trivial pretext, or will spill it, as if by accident; but it will be found, upon questioning, that the real motive is an apprehension of something deleterious being infused. She can recognise every thing, and can, though perhaps will not, answer direct questions: however, when spoken sharply to, it for a moment recalls her wandering ideas. There is generally some fancied thing about which she would be busy.

Sometimes, though rarely in the incipient stage, there is much depression of spirits, with great obstinacy, and all the symptoms of true melancholia. This is also often

a consequence of ill health from suckling too long, joined to domestic trouble. Now and then the symptoms approach the character of fatuity; but in such case there is generally much original delicacy of constitution, or it has succeeded depletory remedies injudiciously pursued. I have never seen an instance where fatuity has been a natural and immediate consequence of lying-in, though it may be the sequel of protracted insanity originating in that condition.

Mr. John Burns mentions* a variety in this disease in which the patient very soon after delivery complains of restlessness, or rather inability to sleep; the head is slightly pained, there is a feeling of unusual muscular weakness, and the pulse is very little quicker than it ought to be. Then, rather rapidly, the symptoms become more marked, the pulse is more frequent, the skin hot, face flushed, the hearing acute, the eyes suffused and sensible to light, the eyelids heavy. There is a sense of tightness in the throat, or suffocation; the feeling of muscular weakness is converted into a degree of paralytic debility; the head is acknowledged to be pained, but sometimes only a very indistinct and varying account can be got of the sensation. Thirst attends, the bowels are costive, and the secretion of milk goes on. There is often no apparent mental derangement, only the patient is generally dull and still, though sometimes irritable; and in some cases decided insanity takes place. If the disease be not attacked vigorously, the paralytic symptoms increase; the pulse becomes very slow, and in many instances even death might follow. "I look on this disease," says this author, "as intimately connected with a particular state of excitement in some part of the spinal chord." Although I have never seen a case of this kind, yet as it has the stamp of high authority, I have quoted

* Principles of Midwifery, ed. 6.

the full description of it. It appears to be a condition intermediate with the irritation of puerperal insanity and the inflammatory state of cephalitis. The success of vigorous depletory measures gives it more the character of the latter.

I have met with several cases of puerperal delirium, which, both in the physical and mental symptoms, strikingly resemble those of low fever, except that pyrexia is absent. As I do not remember this form being distinguished from puerperal mania generally, I shall more particularly notice it. It may be compared to the low species of delirium sketched by Dr. James Sims, before referred to (p. 306), though not as a concomitant of the puerperal state.

In every instance, this variety has come on before the 14th day from delivery: it is preceded by pervigilium; the ideas are at first rapid and confused; images like those of dreams appear, and the delirium is soon confirmed by these illusions being considered as realities, and the speech and actions corresponding with those impressions. The muscular powers are rarely violently exerted, though the patient frequently attempts getting out of bed without any fixed object; on the contrary, she generally lies supine; the countenance is rather vacant, the eyes are half closed, or fixed on vacuity, and when roused follow some imaginary object, the tunica conjunctiva is often highly injected, and the pupils very little sensible to light; the head is hot, skin soft and relaxed, and partial sweating about the throat and neck. She continually mutters incoherently; loses consciousness, except when suddenly and strongly urged; if spoken to, answers shortly, and perhaps rationally, but lapses directly into the former state of indifference; the pulse is quick and uncertain; bowels generally easily moved; lochia and secretion of milk suspended.

About the fourth or fifth day the debility is greater;

there is more coma; pulse is quicker, smaller, and more unequal, with slight subsultus; picking at surrounding objects or bed-clothes; averse from food or drink; insensible of evacuations; the tongue throughout presents nearly a natural appearance, though sometimes tremulous when protruded. It is usually fatal by the seventh or eighth day; and if the patient survives, chronic insanity commonly supervenes, and melancholia oftener than mania.

If a sudden and violent pain in the head, succeeded by coma, precede puerperal mania, the prognostic is fatal.

A preternaturally quick pulse, without manifest cause for it, may be regarded as precursory of puerperal delirium.

The following case had many of the features peculiar to this variety of puerperal mania, but with more of cerebral affection:—

Mrs. ———, aged twenty-four, was delivered, after a tedious labour, of her first child, which was dead. Dr. Merriman, who was called in during the labour, observed that the pulse beat 160; and that after delivery it continued at 120, below which it sunk only a few strokes. Her spirits were a good deal depressed at the loss of the child. Every thing went on as usual, except that the pulse continued as quick till the ninth day. On that day she ate about a dozen roasted oysters very voraciously for dinner. The same evening she evinced much irritability. She was well purged. On the eleventh day Dr. M. found her hysterical, with other very suspicious symptoms; and he prognosticated puerperal mania.

I saw her first on the twelfth day. She had in the preceding night been very violent; but I found her sunk into rather a comatose state, memory much impaired, passing her evacuations unconsciously, and refusing food; complaining of pain in her head, which was very hot;

the pupils much dilated; skin cool; tongue nearly clean; pulse about 100, and small. Her head was shaved, and twelve ounces of blood were abstracted from the occiput by cupping; an evaporating lotion was applied over the scalp, a brisk purgative was prescribed, and she was ordered to take light nourishment.

13th day. — There was renewed violence in the last night. Only a little of the opening medicine had been swallowed, and a very little fluid jelly. No stool; pulse 130, and weaker; head very hot. She had become more comatose by noon, though when roused she knew Dr. Merriman. Blisters were ordered to the thighs, and cathartics in such form as could best be given.

14th day. — One stool only; her state was much the same; pulse weak.

15th day. — Several dark stools; rather more sensible; points to her head as if in pain, and is gratified by the cold application. Six ounces of blood were drawn by cupping from the temples, after which she was momentarily more sensible; but neither medicine nor nourishment had been taken, except by injections.

16th day. — She was for some hours in a state of ecstasis; for a moment, when spoken to sharply, she recognised a person present; afterwards, the low delirium, described as peculiar to this affection, continued. Enemata, with spirits of turpentine in mutton broth, were injected. During this night for about six hours she appeared as in a perfect trance.

17th day. — At 6 A.M. she suddenly roused, and asked for some fruit she saw on the table, and took a little jelly. Pulse very quick, and feeble. A good deal of beef-tea was got down by means of a tube, and some was injected *per anum*, and retained; but she relapsed into the former state of low delirium and stupor. Blisters were applied to the legs.

18th day. — A good deal of nourishment had been

passed into the stomach during the night; but she gradually sunk, and died at 10 A.M., being the seventh from the day that Dr. M. first remarked aberration of mind.

Application to examine the body was refused, which I much regretted. There can be little doubt that the encephalon would have exhibited in this case evidence of cerebral congestion, and probably effusion.

Dr. Gooch mentions a case of a lady, aged twenty-nine, naturally very hysterical, who, experiencing some domestic agitation, was delivered at the seventh month of a dead child. A few days after she was seized with violent head and face-ache, which was confined to the left side, and which subsided under the use of hemlock; but she continued to suffer flatulence of stomach, had a quick weak pulse, and was much depressed in spirits. At length she attempted to cut her throat, but was prevented; and was afterwards very violent. Soon after she became cataleptic, and lost all consciousness. She had three paroxysms of cataleptic symptoms; the delirium then assumed the ordinary form of melancholia. Three months from her delivery she recovered her mental and corporeal functions.

Apoplexy sometimes supervenes on puerperal mania. I have, however, never known a case of it in the early stage of puerperal mania; yet from the affinity of the maniacal and apoplectic constitutions, such an event, without due precautions, might be anticipated. The following case* is an example:—

“ Mrs. G———, about twenty-four years of age, was delivered, the 6th of May, 1798, of her first child. On the fifth night she had little or no sleep; on the sixth

* For this case I am obliged to my friend Dr. Merriman, who found it among the papers of the late Dr. Charles Combe. Dr. M. thinks that the MS. is the handwriting of the late Dr. Bland.

day she was watchful and sullen; and on the seventh day became very visibly deranged.

“ On this day I was called in. By a gentle emetic, small doses of soluble tartar frequently repeated, keeping her perfectly quiet, and suffering no person but the nurse and one female servant to see her, she soon recovered; and I took my leave on June 4th.

“ After this she had three children at separate births, without the least appearance of derangement. But succeeding her fifth lying-in, on the beginning of September (1804), when she had twins, her confinement was again attended by derangement.

“ I was called in on the tenth day. Employing the same means as in the former illness, she very soon got materially better. On the seventeenth day of her confinement I received a note from her husband, informing me that she seemed so much better that he would not trouble me to call the next day as I had proposed. Seven days afterwards I received a message, begging me to come as soon as possible, as it was thought Mrs. G. was dying. Being at home I went immediately, and found her perfectly senseless and comatose, with a thickness in her breathing approaching to snorting; her pulse was hard, though small, and at the rate of 102.

“ Leeches, blisters, and evacuants, were made use of without success; and she died in about forty-eight hours.

“ Very few cases are recorded of an examination of the brain of women who had died during the time of recent puerperal mania, or soon after; I was therefore desirous of procuring leave to examine the brain in this case. This I did not obtain till the third day, which was late, the weather being uncommonly warm. Mr. Chevalier made the dissection, when I noticed the following appearances:—

“ There was nothing particular about the pericranium,

the scalp not appearing to be either tighter or looser than usual.

“ The skull itself was remarkably thick.

“ The dura mater adhered in every part so firmly to the skull, that it could not be separated without dividing it by the scalpel.

“ The vessels of the dura mater were much larger than usual, and therefore appeared more numerous ; but there was no mark of inflammation on this membrane.

“ The forepart of the pia mater of both hemispheres seemed more red than common, and looked as if smeared over with pus somewhat diluted with water ; and the tunica arachnoidea was loaded with the same matter, and was puffed up * above the brain in several parts.

“ On the left side of the brain, about the middle, and near the basis, a blood-vessel had burst ; there was a considerable extravasation under the lower part of the brain on this side, and also surrounding the cerebellum.

“ On cutting very carefully into the substance of the brain, both the cortical and medullary parts appeared somewhat darker than usual, but of the common texture or firmness.

“ The ventricles were in a natural state, with no more water than is generally found.

“ About the plexus choroides were seven or eight hydatids, or rather vesicles, of a pale-red colour, from about the size of a large cherry-stone to that of a small culinary pea.

“ The pineal gland, and all the other parts, were apparently in a natural state.

“ The abdomen was too far advanced towards putrefaction for inspection.

“ From the foregoing examination, the causes of the

* “ Perhaps this was in consequence of some air extricated in the first process of putrefaction, though there was no other appearance of such process going on.”

comatose disposition and subsequent death were easily discovered, viz. the bursting of the blood-vessel, and consequent extravasation. Probably, this apoplectic fit happened while the patient slept, or the nurse was asleep, as nobody was sensible at what time these symptoms first began.

“ In regard to the other appearances, there are none, separately taken, can account for the maniacal symptoms.

“ The strong adhesion of the dura mater to the skull, when very thick, is frequently observed, though the persons when living had no derangement; nor could the size of the vessels of the dura mater be a cause, as this was certainly a permanent affection, which the disease was not.

“ The appearance of thin pus on the pia mater and tunica arachnoidea is constantly observed after long-continued delirium with fever, and seems to be rather a consequence than a cause.

“ Hydatids or vesicles about the plexus choroides are frequently seen when no maniacal symptoms have preceded. Neither are there any facts recorded to shew that the colour of the cortical or medullary parts of the brain being somewhat darker than common is connected with mania.

“ It is, however, I think, right that all the appearances should be mentioned, as, by comparing a number of faithful examinations, we may expect light to be thrown on the cause of this disease.”

In this case, recent inflammation is indicated by deposition of lymph or pus on the pia mater, which was probably the cause of the short-lived delirium.

All the blood-vessels, both of the membranes and brain itself, appear to have been gorged with blood; and as the quantity of serum in the ventricles manifested that there had been no effusion to relieve their distension,

the rupture of a blood-vessel was perhaps a natural consequence.

The pathology of puerperal insanity is involved in the same mystery as that of every other form of insanity. We may presume, that the very act of parturition is one of excessive momentum and determination of blood to the brain; and hence, sometimes violent, and generally fatal, convulsions, are consequent on that condition. In the puerperal state, a suppression of the lochia, or interruption of the process of lactation during any period of suckling, will determine to the brain, and may produce mania or any of its varieties. But in this affection it is evident there are other causes besides mere determination which produce it.

The connexion and reciprocal influence between the brain and uterus must not be overlooked. Mental impressions will suspend labour and suppress the menses; and irritation of the uterus will, during pregnancy or the progress of labour, produce convulsions, apoplexy, and mania.

In some women, particularly those of a delicate form and constitution, the susceptibility, independent of hereditary predisposition, to mental aberration from uterine irritation, is much greater than others. For instance, in some, insanity occurs contemporaneously with conception, and returns with every impregnation. Some become so at various periods of gestation; others at the time of quickening. The delirium may continue a few days or weeks only, or go on till delivery and then cease, or it may be permanent. But the character of the derangement during pregnancy is almost always that of genuine insanity, not the delirium of the puerperal state. In the former case, an hereditary predisposition may generally be traced; in the latter, it originates where there is no reason to suspect such predisposition.

It would be idle to hazard an opinion where all is

conjecture, why parturition in some instances removes intellectual disturbance, and in others occasions it. The condition of the uterine system in gestation, and afterwards in the puerperal state, is very different. On conception, a great revolution takes place in the female system; but that state is comparatively passive to the revolution consequent on parturition. Impregnation itself is a state of excitation to the system; and, like any other irritative process, may elicit the latent hereditary orgasm, or give birth to the maniacal action, which may cease with its cause. Parturition and its consequent processes are still more active; and a greater change is produced in the whole system. If there be a latent hereditary predisposition, the maniacal action is likely to be elicited; but commonly, the attendant delirium on its accession more resembles that of acute disorders than of mania.

It appears, therefore, that the mental derangement consequent on the puerperal state sometimes assumes the form of simple delirium, and is temporary; or it may be graver, and attended by coma, when it is a fatal affection. Sometimes it runs into mania or melancholia, and at other times it begins with the genuine characters of either of these two forms of insanity, and ends in fatuity.

The French pathologists ascribe to moral causes a great latitude in originating this, as well as all other forms of mental derangement. Esquirol says, that in originating puerperal mania, the moral in relation to physical causes are as 4 to 1; and Georget observes, that of seventeen cases in which he has been consulted, he can recognise only two where the delirium has proceeded from any other direct cause than a moral affection.

It must be expected that moral causes have a stronger influence on the female mind in the month subsequent to delivery than at any other period. The mind and body are then both peculiarly susceptible of all impressions;

and I have undoubtedly at this period met with cases where the delirium has been produced by some sudden or afflicting moral impression.

Terror is the most common. Eleven cases of puerperal mania out of thirteen, proceeded from this cause in Paris, during the alarming crisis of the years 1814-15. But my own experience does not prove that this affection is so frequently produced by moral as by physical causes.

Two of my patients only were delirious from fright; others have become so from admitting the too early visits of inconsiderate, though kind, relations and friends. But, in the aggregate, these have been very few, comparatively to those who have developed puerperal delirium from physical causes; and still fewer to those in whom it has been elicited without any apparent cause, moral or physical.

Many conceive puerperal delirium to be a purely sympathetic affection. It is easy to comprehend the existence of sympathy between the womb and the breasts. Haller ascribes it to the conjunction or inosculation of blood-vessels, and similitude in the fabric of those parts.* The functions of the brain are as likely to be disturbed through the anastomosing and communicating branches of nerves with the uterus, as they are from the intestines when mania is superinduced by the sudden check of diarrhœa.

Ferriar conceived that this delirium was produced by conversion from the uterus to the brain; for the balance of the circulation being disturbed, as in gestation, and after delivery when the milk begins to flow, the application of sudden cold, violent noises, or strong moral impressions, occurring before the determination of blood to the breasts is completed, the impetus is easily changed to the head; and hence hysteria or insanity is produced. This appears a sensible theory, and may account for cases

* Phys. Aph. 569.

which are coincident with the period of secreting the milk; but it will not explain why mania should supervene immediately on delivery, before the process of lactation begins.

Delirium, however, often comes on in all these conditions when there are no signs of extraordinary disturbance in the circulation; when every thing has gone on in the most natural way; and when there has been no heat on the skin, no acceleration of pulse, no alarm to agitate the nervous system.

I think, too, if it were the effect of conversion by determining of blood from the breasts to the brain, the symptoms would more uniformly be of a character to support that inference.

Van Swieten and others considered the mania and fatuity consequent on parturition to be the sequel of cerebral inflammation (phrenitis), from suppression of the lochia. But Esquirol, who has dissected several bodies of puerperal women and nurses who had been insane a longer or a shorter time, and died in consequence of this affection, says, that from the most rigorous anatomical examination, no marks whence the cause arose, or of the seat of the malady, could be discovered. Had inflammation been the cause, some traces of it would have been found.

Dr. Gooch also refers to a case where death followed in three days from the attack of mania; but no vestige of disease could be discovered in the brain or elsewhere. In those cases accompanied by coma, or which are preceded by a sudden pain in the head, or great determination to the head, and which prove fatal, there can be little doubt, if an examination were made, evidence of a morbid condition of the encephalon would be apparent. In Bland's case (p. 374), coma was succeeded by sanguineous apoplexy, of which there was abundant proof in the *post-mortem* dissection. I conceive there can be little

doubt but in the case of Dr. Merriman's patient too (p. 372), that evidence would have been found of cerebral disease.

This opinion is further corroborated by Neumann's fourteenth dissection of maniacs:—

“Jeane B. aged thirty, had a natural and easy labour. On the fourth day, milk fever supervened, and a furious delirium followed, but the fever ceased; the secretion of milk and flow of lochia were regular. Ten days from the accession of the delirium, coma came on; the pulse was extremely quick, soft, and small; tongue black; breasts flaccid; lochial discharge had ceased, and there were no alvine evacuations for three days. She died.

“On dissection, the arachnoid membrane was quite opaque, firm, and nearly as thick as the dura mater, with which it had formed many adhesions. The cerebral vessels were full of blood. In the uterus there was merely a sanguineous exudation.”*

This case also confirms the danger to be apprehended when coma accompanies puerperal delirium.

Fatal puerperal cases, according to Dr. Abercrombie, have occurred, which, on dissection, have exhibited nothing more than a slight vascular injection of the pia mater and arachnoid membrane.

These, however, are not ordinary cases of puerperal mania, arising from mere uterine irritation; but appear to originate in some primary affection of the brain, aggravated perhaps by the exciting circumstances of parturition.

Dr. Gooch thinks the cause to be, that peculiar state of the sexual system which occurs after delivery. But this explains nothing.

Georget remarks, that most attribute the development of insanity in lying-in women to the influence which the genital system exercises on the brain, from the suppression

* Lond. Med. Repos. vol. xxiii.

of the lochia or milk. This he doubts, because diseases of the uterus scarcely ever disturb the cerebral functions. The symptoms which accompany those diseases, he says, are generally confined to the part affected; and that patients with such grave diseases as cancer of the womb, die in full possession of their senses. Further, it is not till many months sometimes after the accouchement, and when the uterus is returned to its natural state, that mental derangement happens; and that in all cases the suppression of the secretions, the swelling, inflammation, or suppuration of the breasts, is posterior to the mental affection which has determined and constitutes insanity.

In no instance, this author adds, has he discovered any genital affection, and the breasts were almost always free from disease; and therefore it appears evident to him here, as in most cases of this nature, that the effect is taken for the cause—a symptom for the disease itself.

It is clear, that in many cases a predisposition exists; and in such constitutions, when once insanity has been elicited, every succeeding lying-in may reproduce delirium, without the intervention of any moral or of any other physical cause.

I am not, however, perfectly convinced by Georget's reasoning of the truth of his inference, that when the uterus sustains any grave disease or lesion, the functions of the brain always remain intact. If it be proved that an organ may sympathise with the brain when that is diseased, or its functions disturbed by the reciprocity which exists, the reverse also obtains. No one will dispute the direct influence of the brain on the uterus, when we find that strong moral impressions, as horror, fear, or even disgust, will suspend labour; or its influence on other organs, when a blow on the head will cause vomiting, and inflammation and suppuration in the liver; and, *vice versâ*, that disorders of the thoracic and abdominal viscera have induced cerebral disease; and that

injury of the biliary ducts, or the passage of gall-stones, or a morbid secretion of bile, will occasion convulsions, spasms, and insanity.

But what is more directly opposed to Georget's theory is a fact related by his colleague, Fabret, who quotes the case of a female who was so deranged from the impulse of a cancer in the womb as to commit suicide.*

Dr. Brière reports a case of mania which he imputes to inflammation of the uterus, the internal surface of which was found highly injected, and covered with a puriform deposit. In the brain, the anterior portions of the two lobes were softened, and of a pale-yellow colour, and there were other diseased appearances in the encephalon.†

Mr. Cooke mentions two instances of the womb being found in a state of disease in puerperal mania.‡

In two cases wherein I was consulted, inflammation of the womb produced abortion, and insanity supervened: in one of them suppuration followed, and this case ended fatally; in the other, inflammation did not proceed so far, and she recovered in a month.

The following case is curious, and manifests a connexion and reciprocal action between the brain and the womb, inducive of violent mania:—

Miss ——— aged 25, a fortnight before I saw her had fallen from a chair on which she was standing, and though not conscious of any particular part being struck, she sustained a very violent shock. She immediately experienced pain in her head, and was faint. She soon afterwards described that the left side of her face felt different from the other, and benumbed; and her ideas were confused and wandering. As some concussion was suspected, the physician attending her consulted Sir Astley

* Du Suicide, p. 47.

† Bullet. de l'Athénée de Méd.

‡ Translation of Morgagni, vol. i. p. 140, *in notâ*.

Cooper on her case. She was bled, cupped, leeches, and purged. Her mental aberration, however, increased; and on the thirteenth day from the accident, mania ferox ensued. On the following day she came into my establishment.

The face was swollen and violently flushed; the eyes were red, prominent, and staring; the mouth filled with a thick viscid saliva; tongue white; skin hot; pulse quick, but not strong. The head was shaved, and refrigerating lotions applied to it; she was cupped on the occiput, and sixteen ounces of blood were taken from the arm; was well purged, and put on a low diet, and her room darkened.—Next day she was more tranquil.—Third day very violent, and the symptoms of high excitation very marked. I ordered further depletion; but before she lost more blood, a slight syncope came on, and she was obliged to be supported.—Fourth and fifth days, there was a smart fever, with diarrhœa. She was very incoherent and disposed to violence, but evidently had little strength.—Sixth day, suddenly there was a profuse discharge of pus from the vagina. Tenderness was expressed upon pressure on the pelvic region, and the pudenda were much swollen. She was much reduced by this discharge.—Seventh day, her mind was more composed and clear. The discharge, which was very copious, and diarrhœa, continued the two following days. She sank proportionably, though she took plentifully of every thing to support her.—Tenth day, she became quite rational.—On the eleventh day she expired.

I was extremely anxious to examine the body, but permission could not be obtained till it was too late, for decomposition was very rapid. Her physician afterwards informed me, that about three years before, she had a very severe attack of inflammation of the womb and

appendages, which ended by a discharge of pus as in the present instance.

The expression of this lady's countenance, from the first, denoted deep-seated pain; and, contrary to what occurs in pure mania, the blood drawn from the arm was inflammatory.

The circumstances of this case lead, I think, to these inferences — that the former disease of the uterus could not have been entirely removed, or had left an aptitude to be renewed; that the brain was primarily affected by the fall, with which the uterus sympathised; and that the morbid action induced in this organ re-acted on the brain and disturbed its functions, so as to produce violent mental derangement.

It appears, therefore, that puerperal insanity is occasionally an original, but more generally a sympathetic affection; and that in either case it may assume the characters of delirium, or mania, or melancholia, degenerating sometimes into fatuity.

The predisposing causes are hereditary predisposition, the maniacal or apoplectic diathesis, excessive nervous susceptibility, hysteria, and accessions of insanity previous to impregnation: the exciting causes are all the circumstances attending pregnancy and parturition, moral impressions strongly agitating or depressing the mind, and great irregularities in diet or exercise, or habitual constipation during pregnancy. Sudden cold, irritation, improprieties in regimen, and neglect of alvine evacuations, are the most common causes of delirium during the first month of lying-in.

In default of other information regarding the prognosis of this very important morbid affection, I shall not hesitate referring to our continental neighbours, whose superior opportunities and great industry have tended so much to elucidate the pathology of all cerebral maladies.

The able and indefatigable Esquirol published, a few years since, a highly interesting memoir “On the Mental Alienation of Puerperal Women and Nurses;” * from which I shall extract such matter as appears to me applicable.

In the years 1811, 1812, 1813, and 1814, *eleven hundred and nineteen* insane women were admitted into the hospital La Salpêtrière, in Paris, of whom 92 were cases of puerperal insanity: of these —

- 16 became delirious from the first to the fourth day after delivery.
 - 21 ——— from fifth to the fifteenth day, which is the general extreme term of the flow of the lochia.
 - 17 ——— from the sixteenth to the sixtieth day.
 - 19 ——— from the sixtieth day to the twelfth month of suckling.
 - 19 ——— after forced or voluntary weaning.
-
- 92

Of the varieties of mental derangement —

- 8 were fatuous.
 - 35 — melancholic or monomaniac.
 - 49 — maniacal.
-
- 92

Ages when it occurred—

- 22 from 20 to 25 years old.
 - 41 — 25 to 30
 - 16 — 30 to 35
 - 11 — 35 to 40
 - 2 — — 43
-
- 92

Puerperal insanity occurs, therefore, most commonly in Paris from the age of twenty-five to thirty; though the period of life when insanity is most frequent there, according to Esquirol's Table in the *Dict. des Sciences Médic.*, is from thirty to thirty-five.

* Medico-Chirurg. Annuaire, 1819.

63 were married women.

29 — unmarried women.

In seven of forty-nine deliveries, or one in seven, the access of delirium was about the fourteenth or fifteenth day. Nineteen, or about one in five, became insane immediately or soon after weaning.

If the predisposition to insanity be not very strong in the patient, the probability of cure is great. Thus, fifty-five of the ninety-two recovered.

The duration of the malady was very variable:—

4	recovered in the first month.
7	——— in the second.
6	——— in the third.
7	——— in the fourth.
5	——— in the fifth.
9	——— in the sixth.
15	——— between the sixth and twenty-fourth month.
2	——— after two years.
—	
55	Of whom thirty-eight recovered in the first six months.

Of the ninety-two cases, only six died: one six months after delivery, one in a year, two after eighteen months, one in three years, and one in five years.

From the Paris Tables these corollaries may be deduced:—

1. Insanity is more frequent as a consequence of delivery than of suckling.

2. The danger diminishes in a direct ratio to the remoteness from the period of delivery.

3. Nurses are much more liable to this affection on weaning than during suckling.

4. Mania constitutes rather more than half the cases.

5. Puerperal insanity occurs between twenty-five and thirty years of age, in the proportion of four out of nine.

6. The proportion of cases of unmarried to married women in Paris, is almost one in three.

7. In one in seven, the access of delirium is about the fourteenth or fifteenth day from delivery.

8. In one in five, it came on immediately, or soon after weaning.

9. More than half recover, unless the predisposition be very strong.

10. About four out of five recovered in the first six months.

11. The mortality is only one in fifteen; and not one is recorded as the immediate consequence of puerperal insanity.

This affection, it appears, is of very frequent occurrence in France, in comparison with insanity from other causes. Commonly, it constitutes one-twelfth part of all the insane women admitted into the hospital of La Salpêtrière, and sometimes a tenth.

Among the upper ranks, it is still more frequent in Paris; for Esquirol found in his private practice, that out of 144 insane women, twenty-one became deranged after lying-in and while they were suckling: this is a proportion of one in seven.

Insanity is most commonly manifested in women who do not nurse their children; and as a proof of it, twenty-nine of these ninety-two cases were unmarried women, who, it is said, rarely nurse their infants. But Esquirol seems to forget, that unmarried women are also most exposed to the influence of moral causes to induce this peculiar delirium; and he estimates moral causes as influencing this affection in relation to physical causes, as four to one.

In London, the proportion of unmarried to married women who give birth to children is not nearly so large as in Paris. Besides, in this metropolis, most unmarried women after lying-in find occupation as wet nurses to the children of the rich, or those incapable of nursing,

and they are therefore not so exposed to the operation of moral causes.

I understand that among the rich in France, suckling their children is much more rare than among women of the same rank in England. It should therefore be expected that puerperal insanity is more common among the upper class of females in France than in England, since it is admitted, that this malady prevails most among those who do not suckle their offspring. This, however, is conjecture, since there are no data on which to found a comparison.

Although the number of cases I have to record are fewer than Esquirol has reported, yet, perhaps, a greater proportion of them was under my own observation from the commencement of the attack; and my opportunities of information respecting the causes and progress of the affection were therefore superior. Some of the patients were among the upper classes, and the whole of a respectable rank in society, where the means both of prevention and remedy had commonly been at command. The results, therefore, are more applicable to the circumstances and ordinary associations in life of English women.

I have arranged these cases in a tabular form.

A SYNOPSIS OF CASES OF INSANITY SUPERVENING ON
LABOUR OR WEANING.

No.	Age.	Predisposition.	Date from delivery or weaning, and access of delirium.	Period the delirium continued.	Event.	Observations.
1	30	Hereditary.	Five weeks.	Six days.	Died.	Mania.
2	28	Hereditary.	On weaning.	Nine months.	Recovered.	Melancholia, with disposition to destroy her husband and children, because it would be happier for them. She suffered great mental anxiety and fatigue while suckling, in attending on her husband during a dangerous illness.
3	28	—	One week.	Eight months.	Recovered.	Melancholia. The delirium succeeded a fright.
4	26	—	On delivery.	One week.	Died.	Melancholia — supervened on impregnation with first child. She was well, except one slight illusion, when labour came on.
5	20	—	Four days.	—	Recovered.	Mania. Came on again eighteen years afterwards; but not from child-bearing.
6	23	—	Three weeks.	Five months.	Recovered.	Mania.
7	26	—	On weaning.	—	Uncured several years.	Mania.
8	38	—	Soon after delivery an attack of fever and delirium.	—	Uncured after seven years.	Mania alternating with melancholia.
9	33	Hereditary.	Five days.	—	Recovered.	Mania. Several relapses occurred, and at length permanent at the age of forty-eight.
10	23	Hereditary.	One week.	Five months.	Recovered.	Melancholia. Relapsed on next pregnancy.
11	28	Hereditary.	On weaning (from cold).	Fourteen months.	Recovered.	Mania alternating with melancholia.
12	30	Hereditary.	A few days.	Six months.	Recovered.	The same. Insane after every delivery; and died so eleven months from last attack, which did not succeed parturition, aged forty-six.
13	24	Hereditary.	Two weeks.	Fourteen weeks.	Recovered.	Melancholia. Occasioned by great domestic affliction while pregnant.
14	25	—	Two weeks.	Two weeks.	Recovered.	Mania.
15	28	—	Four days.	Six weeks.	Recovered.	Mania.
16	30	Hereditary.	Five days.	Eight months.	Recovered.	Mania.
17	26	—	Six days.	Six weeks.	Died.	Mania. Died suddenly, without apparent cause.
18	40	—	Five days.	Ten days.	Died.	Mania.
19	25	—	Three weeks.	Six weeks.	Recovered.	Mania.
20	38	Hereditary.	Some time after delivery	A year.	Recovered.	Melancholia.

No.	Age.	Predisposition.	Date from delivery or weaning, and access of delirium.	Period the delirium continued.	Event.	Observations.
21	30	Hereditary.	Two weeks.	Three months	Recovered.	Mania. She lost her husband before delivery, and this was supposed to occasion the derangement. She relapsed a year after, without apparent cause.
22	23	—	Three days after delivery of a dead fœtus.	Six months.	Recovered.	Melancholia.
23	26	Hereditary.	Four days after delivery of a dead fœtus, (from cold.)	Two years.	Recovered.	Mania.
24	40	Hereditary.	Some weeks after delivery	—	Uncured after four years.	Melancholia. There was no secretion of milk after delivery, and she caught cold. Spirits much depressed during pregnancy, from reverse in circumstances.
25	35	Hereditary.	Three weeks.	Six months.	Recovered.	Melancholia.
26	22	Suspected.	One week.	Six weeks.	Recovered.	Melancholia. Two years afterwards she relapsed and attempted suicide, but recovered immediately upon inflicting a wound, attended by immense hæmorrhage.
27	25	Hereditary.	Two weeks.	Two months.	Recovered.	Mania, ending in melancholia.
28	18	—	A few days, from cold and retrocession of milk.	—	Recovered.	Mania. Relapsed nine years afterwards, and again in three years, and died insane.
29	22	—	Three months after fever.	Seven months	Recovered.	Mania.
30	30	Hereditary.	An abortion at the fourth month.	—	Suicide.	Melancholia alternating with mania. She hung herself.
31	22	—	Two weeks.	Fourteen days	Recovered.	Mania.
32	30	—	Three weeks.	Twelve days.	Died.	Mania. She sank into low typhoid fever.
33	24	—	Eleven days after delivery of a dead fœtus.	Five days.	Died.	Melancholia: there was much of coma from commencement of delirium.
34	22	Hereditary.	A few days.	—	Uncured four years.	Mania alternating with melancholia.
35	27	—	Two weeks.	Three weeks.	Recovered.	Mania.
36	26	Hereditary.	Six days.	Fourteen days	Recovered.	Melancholia, and again twenty-four years afterwards.
37	26	Hereditary.	One week.	Seven days.	Recovered.	Mania.
38	35	Hereditary.	On delivery.	Six months.	Recovered.	Melancholia alternating with mania. Some threatening symptoms during pregnancy, from living in a constant state of too much stimulation from wine and anti-nervous remedies.
39	30	—	Two weeks.	Three weeks.	Recovered.	Mania.

No.	Age.	Predisposition.	Date from delivery or weaning, and access of delirium.	Period the delirium continued.	Event.	Observations.
40	22	—	Seven days.	Two weeks.	Recovered.	Mania. She experienced a very similar attack twenty-four years after, but not from parturition, and it lasted some months.
41	20	—	Three days.	—	Uncured.	Mania.
42	20	—	One week.	Seven weeks.	Died.	Mania.
43	20	—	Five days.	Six days.	Died.	Mania.
44	28	—	One week.	Six weeks.	Recovered.	Mania.
45	20	Hereditary.	Five days.	—	Uncured after two years.	Mania alternating with melancholia.
46	21	Hereditary.	Two weeks, from cold caught, and fever.	One week.	Died.	Mania.
47	22	—	One week.	Three months	Recovered.	Mania.
48	27	—	Four days.	Three months	Recovered.	Mania.
49	32	Hereditary.	Directly after abortion.	Three months	Uncured six years.	Mania. She was six years insane, several years before marriage and after it; but regular labours had never disturbed her intellects.
50	38	Hereditary.	Two months after abortion.	Four months.	Died.	Mania. The abortion was consequent on a diseased state of the uterus.
51	35	—	Directly after abortion.	Four weeks.	Recovered.	Mania. Uterine inflammation produced the abortion.
52	30	—	One week.	Fourteen days	Recovered.	Mania.
53	40	Hereditary.	Three months; first child.	Six months.	Uncured.	Mania.
54	29	Hereditary.	Two weeks.	Four months.	Uncured.	Melancholia.
55	22	Hereditary.	One month.	Two months.	Recovered.	Melancholia. In this case some equivocal symptoms took place during pregnancy, and there were strong moral causes occurring just after delivery.
56	30	Hereditary.	One day.	Five months.	Uncured.	Mania, terminating in melancholia. Some aberration during pregnancy.
57	38	Hereditary.	Six months, while suckling.	Seven months	Uncured.	Melancholia. It came on immediately on her infant dying suddenly in her arms from convulsion.

N.B. Five of these cases I consider to be undetermined.

In the column, "Predisposition," where blanks are left, hereditary affection could not be traced.

In the column recording the duration of the delirium, the blanks denote, uncertainty.

Of the varieties of mental derangement constituting this number,

33 were maniacal.

16 melancholic.

8 alternating.

57

I never met with one permanently fatuous from puerperal insanity.

In mine there is a greater proportion of cases of mania than in Esquirol's Table.

Ages of Puerperal Women in the above Table.

1 18.

18 from 20 to 25.

17 — 25 to 30.

10 — 30 to 35.

11 — 35 to 40.

57

Here are about as many affected between twenty and twenty-five years of age, as between twenty-five and thirty. In Esquirol's Table, the number in the latter nearly doubles that in the former period. There is also a marked difference in the number affected between thirty and thirty-five, and thirty-five and forty, in the two Tables.

Fifty-three were married women, and four single. Nearly one half of the patients in the French Table are unmarried women; in mine, they constitute a fourteenth. Possibly, this circumstance alone will account for the great difference which Esquirol and I have experienced in the number of cases originating in moral causes. I could only trace seven of the fifty-seven cases to this source.

In 33, the access of delirium was before or on the fourteenth day.

In 11, ————— after the fourteenth day, and
before the twenty-eighth.

There is a striking variance also in the time when delirium came on, in Esquirol's and my statements: he notices that,

In 39 deliveries, delirium occurred before or on the fourteenth day.

49 ————— about or after the fourteenth day.

Neither does the number of recoveries accord in the two Tables: in mine,

35 recovered, of whom 28 were in the first six months.

11 uncured.

10 died.

1 suicide.

57

The recoveries, therefore, are in the proportion of rather more than three-fifths:—in the Paris Table, the proportion is as $5\frac{1}{2}$ to $9\frac{1}{4}$, or above half. Dr. Haslam says, that of eighty females who were admitted into Bedlam, insane from lying-in, fifty recovered; a number not disproportionate to the result in the French Hospital of La Salpêtrière.

Duration of the Insanity in the Thirty-five Cases which recovered.

9 recovered in the first month.

5 ————— second.

5 ————— third.

3 ————— fourth.

2 ————— fifth.

4 ————— sixth.

1 ————— seventh.

2 ————— eighth.

1 ————— ninth.

1 ————— twelfth.

1 ————— fourteenth.

1 ————— twenty-fourth.

35

The corollaries to be deduced from my experience in puerperal insanity, are:—

1. That mania is a more frequent consequence of lying-in and the process of lactation, than any other variety of mental derangement.

2. That puerperal insanity occurs from the age of twenty to thirty, in the proportion nearly of two to one at all other ages.

3. That in London, physical causes much more frequently originate puerperal insanity than moral causes; the physical being to the moral as ten to one. In Paris the reverse obtains, and the moral are to the physical as four to one.

4. That the access of puerperal insanity happens before the fourteenth day in three out of five cases.

5. That it happens between the fourteenth and twenty-eighth days in one out of about six cases and a half.

6. That nearly four in five recover their intellects.

7. That not more than half recover in six months.

8. That those recover soonest whose delirium supervenes on the process of lactation.

9. That the maniacal form ceases sooner than the melancholic.

10. That the mortality is *apparently*, but not *really* (as will be proved presently), double Esquirol's return; and that the greater number of deaths occurred before the second week from delivery.

11. That half, and possibly more, if the truth could always be discovered, attacked by puerperal insanity, prove to possess an hereditary predisposition.

Thus Dr. Denman is certainly in error in saying, that puerperal insanity never continues longer than six months. A reference to either of the preceding Tables refutes his assertion.

Equally mistaken is the common opinion, that puerperal insanity is unattended with danger. This conclusion probably is derived from the observation of Dr. William

Hunter, who, in his lectures, said, it was a species of madness which generally cured itself; for in the twenty *or* thirty cases he had seen in the course of his practice, all had recovered. I fear that here this celebrated physician was inaccurate; for otherwise, in so interesting, and to the accoucheur so distressing, a malady, it is scarcely possible he would speak so loosely, and give the sweeping latitude of twenty *or* thirty when referring to the extent of his experience.

Dr. Gooch, in an interesting paper which he published on the subject of puerperal mania,* in reference to the mortality attending it, refers to two fatal cases only within his own knowledge; one where death occurred three days after an attack of mania, and another several weeks afterwards. He also alludes to two cases attended by two medical friends, which terminated fatally. This intelligent physician supposes, that as six had died of the ninety-two cases in La Salpêtrière, they were picked bad cases, which had resisted the ordinary treatment at home, and on this account were sent into that institution.

I own I attach very little weight to the cases of mortality reported by Esquirol; for not one of them, as I have remarked, occurred till more than six months from the access of the insanity; and in others, years had intervened. These, therefore, had all become chronic cases; and, taken in the aggregate, do not give a greater rate of mortality than is allotted to the same number who are insane from other causes.

I have recorded ten deaths in fifty-seven cases. Seven of them occurred within twelve days from the access of the delirium, two within seven weeks, and one after four months: two of these had active uterine disease, and two others died in consequence of relapses, after they had recovered from puerperal mania.

* Med. Trans. vol. vi.

This, however, is a fearful degree of mortality ; and if no redeeming circumstance could be interposed, would rank puerperal mania among the most fatal of diseases.

Truth, however, compels me to acknowledge, that I do not infer this malady to be naturally as mortal as the proportion of deaths here recorded intimates. My reasons for this conclusion will appear presently, when discussing the treatment of puerperal insanity. Nevertheless, I will state with confidence, that whether left, as Dr. William Hunter almost recommends, to cure itself, or whether it be treated in the most judicious manner, it is a dangerous disorder, on which a very cautious prognostic should be delivered.*

TREATMENT OF PUERPERAL INSANITY.

In prescribing remedies in a case of recent puerperal mania, we must not for an instant lose sight of the actual situation of the patient. Denman sensibly observes, that when a woman is recently delivered, the attending circumstances reduce her to the state of a person who has had a profuse evacuation of any other kind.

In the curative treatment of the acute disorders of lying-in women, such as inflammation of the womb or peritoneal membrane, depletion is incumbent ; but I need scarcely remark, how ill such measures are borne by these patients, and how frequently death is the result when all the active symptoms of the disease have subsided.

I have already said, that in every case of insanity the utmost caution should be observed, lest symptoms of exci-

* That puerperal insanity often terminates fatally, I have opportunities of ascertaining beyond the extent of my personal observation ; for medical practitioners and others frequently procure nurses from my establishment, to attend on insane puerperal women ; and I have had occasion to remark, that these nurses frequently return in a few days, the patient having died. One practitioner, near London, had three cases in two years terminate fatally ; and another, his neighbour, two in one year.

tation should be mistaken for inflammation, or muscular exertion for vital power; and in the treatment of puerperal insanity, this admonition is especially required.

When called to a case of this nature which has occurred within the month following lying-in, I cannot too forcibly impress the remembrance, that the puerperal patient is already reduced by parturition and its consequences; and that the process of lactation itself produces fever and considerable irritation, both of which will ordinarily subside in a few days, if the bowels be opened, and the milk have a natural vent, or be duly carried off, when, from accident, suckling is impracticable. Let it be remembered, too, that the delirium connected with the lacteal process is not idiopathic, but symptomatic of febrile excitation, or a sympathetic affection of the brain with the uterus.

With such views of the condition of the patient and the nature of the malady, I think it will be conceded, that depleting and reducing is not the proper course to restore the equilibrium of those functions on which health and a sane mind depend.

With pain I must acknowledge that I have too often found, when called to a case of puerperal insanity, that the sins of commission in the treatment of it have been infinitely greater than those of omission; for in most of them, depletory measures have been pushed to an unreasonable extent; so that the issue was already perhaps determined before I was consulted, and no alternative left but death or long-continued insanity. And to this cause, I fear, must be ascribed a larger proportion of mortality consequent on puerperal insanity, than would result if a more cautious system of practice were adopted.

When insanity is consequent on a state of gestation itself, a strong predisposition may be suspected. In this case the return of sanity is rare before delivery, and the

therapeutic art is seldom of any avail. Sometimes, however, the development of mental aberration during this period has been found to arise from adventitious causes. For instance, when any cutaneous eruption, which in some is periodical, has not appeared, or has suddenly retroceded; or when leucorrhœa, or any accustomed artificial discharge from setons, issues, &c., has stopped during pregnancy, and insanity has supervened, the cause may be suspected to originate in such circumstances; and those means ought to be used which are most likely to reproduce them. Whenever mental aberration, however slight, or signs of it, have been manifested during pregnancy, every kind of stimulus should be avoided, the bowels should be kept soluble, and moderate venesection, especially towards the end of that period, be practised; and during parturition, the greatest precautions should be taken to preserve the patient free from irritation or alarm.

Dr. Biot mentions a case illustrative of the connexion between the skin and the uterus, as inducing mental derangement. A young woman, while single, had the menses often obstructed, and experienced attacks of furious mania. During her first pregnancy she was similarly affected. Repeated bleedings were ineffectually tried; and the derangement continued many months. She again became pregnant; but from its commencement, both her cheeks were covered with a pimply eruption till near her lying-in; and she had not during the whole period of this gestation any symptom of insanity.*

Therefore, when insanity is developed during pregnancy, it may be a fair experiment to produce an artificial eruption on the skin, or a derivative discharge, as counter-irritants.

It appears that puerperal mania is exhibited in two

* Bibliothèque Médic. tom. xlix. p. 12.

forms, but each distinct in their physical characters: the one in which the delirium is high, and accompanied by symptoms of ordinary excitation only, with occasional temporary fever, of which, however, the delirium is independent; the other in which the delirium is low, and accompanied by symptoms of cerebral disease, with coma, and having a resemblance to low fever, though pyrexia be absent.

The first, if properly treated, is attended perhaps by little danger, either of life or continued insanity; the second is attended by great danger under any treatment; and if life be saved, it is commonly at the expense of reason.

The chance of curing any disease is influenced as much by the period of the disease when medical advice is required, as it is by the suitableness of the remedies prescribed; and there is no malady to which mankind is liable, where the truth of this axiom applies more strictly than to every species of mental disorder. I am inclined to believe puerperal mania is most essentially influenced by the observance or neglect of this maxim.

In many of these cases, much valuable time after the development of delirium is lost before advice is sought and suitable remedies are applied.

It need scarcely be remarked, that, as a general rule, in those cases where the delirium comes on after the secretion of milk is completed and the lochia are flowing in due course, and both these secretions are suspended, that to restore them, offers the best chance to restore also the intellectual functions to health. With the return of these secretions there is often an abundant leucorrhœa, mucous stools, and, at the proper period, a return of the menses. I have seen suppuration of the breasts prove critical, and so likewise may other abscesses. In a lady aged twenty-two, of a scrofulous habit, whose child was dead-born, induration of one of the submaxillary glands

followed, and soon after, mania, succeeded by melancholia. The husband, who was in fear for his wife's beauty, would not suffer any application to encourage suppuration; and she continued insane many weeks. At length, in spite of my polite acquiescence, matter formed, the abscess discharged, and the lady in a few days recovered her senses. She has had several children since without a recurrence of mental disorder.

Whenever the insanity is fully developed, the first duty is to secure the safety of the patient by preventing her doing injury to herself or others. No step is so effectual to attain this end as to place her under the management of an attendant experienced in mental disorders, who, being alive to every delirious manœuvre, will take due precautions against it.

Free evacuation of the bowels is the next necessary measure. The delirium has sometimes ceased in a few hours after its access, simply from the purging off an immense quantity of unnatural fæces.

The bowels should be regularly but not violently purged by a dose of calomel, and the common purging mixture of salts and infusion of senna. The alvine evacuations are often black and tenacious, and very offensive; and so long as they continue so, regarding always the strength of the patient, purging is indicated. If purging weakens, the intestines must be emptied by means of glysters.

When the delirium is of a more determinate character, other measures must be resorted to.

If there be vascular excitement and determination to the head, which is commonly the case, with a preternatural heat of the scalp, redness of the eyes, pain, or throbbing in the head, (which, however, is not always complained of,) and want of sleep, — the head should be immediately shaved, and blood be abstracted by cupping in preference, or by leeches, on the occiput, vertex,

temples, or behind the ears, according to the part where the uneasiness is felt. The quantity drawn should be regulated by the natural constitution and habits of the patient, and which, if not already known, should be as accurately ascertained as possible. The symptoms of excitement are commonly relieved by the loss of blood, but are apt to recur; when, if the patient be not weakened, the cupping or leeching, and moderate purging, may be repeated, and, with the same caution, so often as there may be occasion.

If the heat or pain be not removed from the head by the abstraction of blood, evaporating and refrigerating lotions should be applied all over the shaven head.

The pulse, as well as the muscular movements, in this and in all other species of mental affection, as I have before remarked, is commonly referred to as the index of the strength of the patient. They are both equally fallacious signs, and must never be trusted in these more than in any other cases of insanity.

The pulse, indeed, in puerperal insanity, rarely justifies general blood-letting or great depletion. The only case where it is, perhaps, admissible, is where the system is very plethoric, and convulsion or apoplexy is threatened. In those cases where the delirium is coincident with the fever attending the first secretion of the milk, the pulse is quick and sometimes feels full; but this condition of it must be viewed as a temporary one, which will subside in a few days, even though the delirium perseveres. Blood-letting in this case would only produce subsequent exhaustion, and exasperate the delirium.

Nauseating doses of tartarised antimony, with the saline mixture and digitalis, will aid in reducing the violence and fury of the patient. But we must recollect, that from whim or obstinacy, and very often from a suspicion of poison, the patient will not take suf-

ficient nourishment; and if so, evacuation must be more sparing; and exciting nausea, besides diminishing the vital powers, will rather encourage the distaste for food and medicine.

At the time the head is so hot, and there are other symptoms of determination to the brain, and excitation, the lower extremities will frequently be very cold. In this case, after the loss of blood by cupping, &c. and while the cold applications are made to the head, the patient may be placed in a warm slipper or hip-bath; or the legs and feet only may be immersed in a foot-bath filled with a warm infusion of mustard-seed or of horse-radish. Both these baths tend to equalise the circulation and relieve the cerebral irritation.

If the secretion of milk be suddenly suspended, means should be adopted to restore it. If the delirium be developed with the accession of the milk, the secretion must be encouraged by inducing the child to suck, or by drawing off the milk artificially; and even when the breasts have become empty, it will be useful to continue these means for some time, in order to determine the milk to its natural channel. Sometimes the mother evinces an apathy towards her child: putting it to the breast if she will permit, often revives maternal feeling—a point of much importance. The renewal of the lochia, if suppressed, is desirable; for it is essential that every natural discharge should be promoted. The means of accomplishing this, however, are not very certain. The French are fond of applying leeches to the vulva, in order to produce a vicarious discharge from the vessels contiguous to the uterus. In such cases, I have seen a good effect from drawing blood by cupping on the sacrum. The flow of the lochia may also be promoted by a warm bath, or where this cannot easily be procured, by a hip-bath; for which purpose, among the poor, an ordinary

washing-tub is a good substitute. Warm fomentations applied over the pubes and to the pudenda, or injecting gently stimulating glysters, are serviceable.

Besides venesection there are two other favourite remedies generally adopted in the treatment of puerperal mania, but which are rarely useful for want of due discrimination: these are opiates and blisters. Want of sleep being a common and distressing concomitant of this disorder, the means of procuring repose is an important object. I have seen opium tried in every form and stage of puerperal delirium, and sleep sometimes induced; but unless certain preliminary steps have been taken, I have never known any abatement of the symptoms from sleep so procured.

In no case where determination or congestion of the cerebral vessels is denoted, or there is great excitation, will an opiate have the desired effect, till those vessels are in some degree emptied, and the bowels well evacuated. Of course, all narcotics are inadmissible where there is any degree of coma. The best soporific, however, and the most certain, after the cerebral blood-vessels are relieved and the bowels act freely, is, the application of cold to the shaven head. Its effect, not only in producing general composure but sleep also, is wonderful; and the patient commonly is so sensible of the relief it affords, that the renewal of it is often directly or indirectly solicited. Should the head feel quite cool, and there be no flushing of the face or throbbing of the arteries, or other indication of cerebral excitement, cold applications to the cranium are not called for.

Should the preliminary measures I have recommended, and the cold applications to the shaven head, fail to produce sleep, and the marks of congestion and vascular excitement be abated, I have then frequently found great advantage from an opiate. But in that case the dose should be large, for small doses only increase the irritation

and delirium. If an opiate be administered, costiveness must be guarded against, by combining the narcotic with an aperient, or having the bowels emptied afterwards by a glyster—a mode frequently the most eligible, from the weak state of the patient. Calomel combined with solid opium, taken at bed-time, often answers well; and I have found Batley's liquor opii sedativus much superior to every other liquid form of opium. The head is less affected by it, nor does it confine the bowels so much* as opium. A dose of extract of hyoscyamus (from ten grains to a scruple) is sometimes effective. Dr. Gooch recommends camphor combined with it; but I have never seen any benefit from it in the early stages, and while vascular excitement continued.

In respect to blisters in cases of puerperal mania, I have little faith in their efficacy. If applied to the head or contiguous parts during the state of exacerbation, they decidedly do harm. The only way in which I have thought advantage has been produced by them is, as a derivant, when applied to the thighs or legs. When there is coma or torpidity of the system, and particularly of the skin, or the circulation in the extremities is too languid, they may be serviceable; but when stimulating only, and not a discharge, has with these symptoms been indicated, I have found more benefit from sinapisms to the feet. In applying them, however, there is one caution to be observed, which is, that they be not kept too long on the feet: as soon as the patient begins to complain, or evince great pain from them, they should be removed, and renewed at short intervals. From being kept on beyond this point, I have known the ordinary delirium carried to perfect fury. The same effect may be

* One drop of this preparation is said to be equal in strength to three, but I think it very little stronger than tincture of opium, and not so much so, though preferable, as the black drop.

produced from blisters injudiciously applied to the head of a person in a state of mania or epilepsy.

I repeat, that great care must be taken in the incipient stage of puerperal insanity, that nutriment of some kind be got down; for a sudden and most unexpected state of exhaustion frequently supervenes, and may carry off the patient.

When the symptoms of cerebral excitation subside, the exhibition of mild tonics is advantageous; and these by degrees should be changed for the cinchona, ferrum, and a more generous diet: air and exercise are also essential. The shower-bath will then be found very beneficial. In convalescence, the mind generally improves with the body; menstruation then perhaps comes on, and the recovery is usually soon completed.

In respect to what is termed moral treatment, the same advice applies as in general insanity. And here the important and delicate point of seclusion from relations presents itself. The circumstance which should govern it is, the existence or freedom from any morbid association of ideas with home, or perversion of affections, suspicion, &c. If the affections are natural, and it does not revive illusions, or irritate, some domestic intercourse may be allowed; but those only should have that permission against whom no prejudice exists. In recent delivery, the patient cannot, under any circumstances, be safely removed from her home; but as soon as that can be done, if the delirium be of the description to require it, it ought not to be delayed.

Change to a new scene, and with strangers, severs morbid associations of ideas, and therefore facilitates the cure. Sometimes the delirium is temporary, and subsides in the course of the month, and happily supersedes the necessity of removal.

It is highly important that ignorant and boisterous people should be removed from attending on the patient:

they always agitate and alarm her. The society even of the nurse who has been accustomed to attend in former lyings-in is often equally objectionable with a relation or friend.

Exceptions occur : when the delirium betrays no morbid feeling towards relations or any part of her family, the patient will be treated with equal benefit at home ; though unlimited intercourse with friends is never prudent.

Whether separation be required or not, must always depend on the judgment of the medical attendant. He ought, however, never to advise such a measure till confident that the welfare of his patient depends on it ; and then he should recommend it with all the weight of professional authority.

COMMENTARY VII.

SENILE INSANITY.

THIS is a species of mental aberration peculiar to old age, and hence designated by some, *Delirium Senile*; by others, *Senile Insanity*, and so I distinguish it.

It developes itself in those who may never before have been insane, nor possess hereditary predisposition. It comes on, perhaps, when the reflections attending a well-spent life, and every earthly comfort, might otherwise ensure calm repose for the short remnant of existence. Hence this affection is the more distressing to the patient's family, since it is the disappointment of a promise well deserved.

In this singular affection the system is influenced by an extraordinary excitation, prompting the revival of youthful passions and follies, when the powers of fruition have long ceased.

The whole moral and intellectual character of the patient is changed: the pious become impious, the content and happy discontent and miserable, the prudent and economical imprudent and ridiculously profuse, the liberal penurious, the sober drunken, &c. Persons in whom the sexual passion has been long dormant suddenly become lascivious and obscene, and abandon themselves to all sorts of vices. In fact, the reverence which age and the conduct suited to it always commands, is converted into shame and pity at the perversion of those moral and social qualities which, perhaps, have hitherto adorned the decline of the patient's days, and endeared him to his family and friends.

The character of this delirium may be gay or sad.

I was lately consulted in two cases of this kind, but where the characters of the attack were quite opposite.

A gentleman of a noble family had, during the course of a long life, experienced many singular reverses of fortune. He was a man of fashion of the old school, and of high honour and character, but had long resided in dignified retirement upon a very ample fortune.

His constitution was hale, though he had many years suffered from dysuria. He possessed naturally strong feelings and passions; but, even to the ninetieth year of his age, enjoyed in a remarkable degree every faculty, and especially a clear understanding.

Suddenly he became more violent and imperious in his conduct and conversation, purchased many ridiculous things, especially those which would gratify a taste for good eating; he grew fond of wine and spirits, and now took much more than his usual quantum. He gave orders for the increase of his establishment and the purchase of estates, &c., and in every thing evinced an altered and profuse disposition. At length, the least contradiction or gentlest remonstrance threw him into ungovernable fits of passion, and he threatened violence to all who opposed him. He also entertained many absurd delusions.

At this juncture I first saw him. I immediately placed him under the guidance of a careful and judicious attendant.

It was remarkable, that the natural standard of this gentleman's pulse had never, in the vigour of his life, exceeded fifty. It now beat the same, and was full and strong. He had for some time felt a dull pain and weight in his head; it was now hot, his face was flushed, the conjunctiva much injected, and the eyes sparkling, the tongue whitish and rather parched, and he was

very restless at night; the bowels were obstinately constipated.

Such gentle means were used to remove cerebral excitation and regulate his bowels as his great age pointed out to be suitable. In a short time he improved in his bodily health from this plan, but none of his propensities and delusions varied; yet he could command himself very well during my visits; and as he possessed a senile memory, that is, a perfect recollection of far-gone events, though not of recent, he would then relate, in a very delightful way, anecdotes of the most distinguished characters of the past century, with whom he had associated.

In about three months the powers of his constitution gradually declined, and when the hot weather set in he sunk, the delirium continuing to the last.

The other case was that of a gentleman of fortune, aged eighty-four, of great accomplishments and high estimation, and possessing every worldly happiness.

He suddenly displayed an extraordinary and erroneous view of his own affairs, and all the relations of life. He fancied that his pecuniary circumstances were dreadfully deranged; that he had not the means of subsistence; that he was an object of his children's and grandchildren's abhorrence, though he lived affectionately regarded in the bosom of his family.

I saw him at this period. No hereditary predisposition existed. There was little corporeal derangement, except some slight gastric affection, his digestion being lately somewhat impaired, and the action of his bowels rather irregular. I prescribed such remedies as might improve the power of the digestive organs, and such means as were calculated to soothe and amuse him. But especially recommended that the patient's conduct should be carefully watched, lest, entertaining such desponding and wretched ideas, he should attempt his own life. As he was not violent, the family would not be

persuaded to place him under the supervision of a proper attendant.

Three days afterwards, in going to his chamber, the staircase-window being open, he precipitated himself into the area, and was killed on the spot!

Another case of this affection, proceeding from metastasis of intestine irritation, is detailed at page 209.

It has been remarked by Aretæus, that this peculiar condition of the mind in old people is always fatal—a result naturally to be expected, considering the advanced age when it appears. All the vital powers are at this period deteriorated, and then very slight cerebral irritation will generally suffice to destroy the enfeebled system. Therefore, it is not the violence of the disorder, but the weakness of the patient, which precludes recovery. Nevertheless, if the delirium be of a happy character, and the constitution good, it may persevere, unchanged, for months and years.

The treatment of *Senile Insanity* must generally be purely palliative; but I see no absolute reason, when the cause is not organic, and due care is used to prevent the consequences of a delirious paroxysm, why proper treatment should not much ameliorate the condition of the patient; or even, when the powers of life are not too exhausted, effect a restoration of the mental faculties.

It is obvious, that the only remedies which can be prescribed in these cases, are those which will remove any inordinate action in the system without reducing the strength, regulate the natural functions, and renovate.

COMMENTARY VIII.

SUICIDE.

A PROPENSITY to self-destruction, like any other peculiar delusion, is but a symptom of deranged intellect, and can only be viewed as a feature of melancholia. But from the frequency of suicide, and its important effects on society, it claims a distinct consideration.

Suicide is committed under very opposite impulses; and, under certain circumstances, a doubt may naturally arise, whether it be not sometimes perpetrated by a sane mind. The art with which the means are often prepared, and the time occupied in planning them, seem to mark it as an act of deliberate volition; but the acts of an insane mind are involuntary, and not voluntary; therefore the question must always revert to, what was the real condition of the mind when suicide was committed?

The propensity to suicide is sometimes innate or hereditary, and the act is done without any other apparent or assignable cause. Sometimes it is premeditated, resulting from a moral cause too great for the mind to sustain; sometimes it is the effect of a sudden and violent impression, where no time is left for reflection; sometimes it is incited when the spirits are depressed or agitated by some unlucky association of thoughts, and a favourable opportunity presents; sometimes to elude disgrace or merited criminal punishment; and sometimes, although physical pain is always supported with more resignation than moral agony, yet suicide has been deliberately committed to escape extreme bodily suffering.

Many contend, that the remote causes of suicide exist always in some lesion or disease of the thoracic or abdominal viscera. I will not dispute that this may sometimes be the fact, because I believe that it is so frequently where there is general insanity without propensity to suicide. But certainly, neither in the encephalon, nor in other viscera, has any lesion or disease been detected which peculiarly characterises suicide.

Dr. Falret, who has written distinctly on suicide,* infers, that the affections of the viscera in mental derangement are always secondary, while the primary affection is in the encephalon. He admits the full influence of cerebral affections in disordering the functions of the stomach, liver, &c., but rejects the influence of the latter on the former so as to produce suicide. This author conceives, 1. That suicide depends no more on diseases of the abdomen than on those of the skin, for example; 2. That it cannot have its seat except in the organ of the intellectual and moral faculties; 3. That it is infinitely more rare for lesions of remote organs to be the cause; and that, consequently, the encephalon almost always is primitively affected, and is the source of the mental disorder.

I will not pretend to say how far the functions of the skin may be implicated as causes of suicide in particular. We know that regularity of these functions is essential to good health; that the production of a cutaneous eruption has at once removed, and the sudden retrocession of it occasioned, insanity; and therefore the influence of the functions of the skin on the intellectual faculties must be acknowledged.

This author pointedly contradicts the opinion, that lesions of the liver, or concretions in the biliary ducts,

* *Essai sur le Suicide*, Paris, 1822.

are frequent in suicides ; and he asserts that they are not more often met with in them than in melancholics.

This may be true as it regards the morbid appearances in the biliary organs of suicides, for I cannot contradict it from personal examination in similar cases ; but I know from experience, that where jaundice has been threatened, the operation of a brisk purge, which has evacuated a quantity of vitiated bile, has quite removed a sudden propensity to suicide in some, and very often diminished it in others ; and I have seen the suicidal propensity removed by spontaneous diarrhœa, of very bilious stools.

Every physician's experience must have afforded opportunities of witnessing the influence of the biliary secretions on the mind ; sometimes producing the greatest irritability, restlessness, and violence ; and sometimes distressing depression of spirits, with the most horrible ideas.

The alterations observed in the abdominal and thoracic cavities, the same author remarks, are either consecutive on insanity, or dependent on the influence of extraneous circumstances to which the insane have been submitted, such as localities, climate, seasons, manner of living, treatment, &c. I admit that this may be so ; but it does not disprove that sometimes insanity, and therefore suicide, is a secondary affection, originating in abdominal and thoracic morbid viscera.

If the viscera are affected secondarily from a morbid action or disease in the brain, I know not by what reasoning we should deny a reciprocal influence, and that the brain also may be secondarily affected. Although actual disease of the liver in cases of suicide be rare, and concretions are seldom found, yet a diseased hepatic action may exist, and the ducts in consequence be irritated by the passage of vitiated bile ; and hence the brain, through the nervous influence, be sympatheti-

cally affected, and the mental depression prompting suicide induced.

The apparent absence of lesion or disease in any organ of the body, I repeat, does not disprove the existence of a morbid condition. We daily witness the extraordinary effects of sympathies, and I am led to conclude that a disposition to suicide may in this way arise, as well as any other morbid impression on the mind.

I have several times seen the propensity to suicide developed where it never before existed, in the last stage of phthisis pulmonalis. So likewise in cases where the liver or the spleen has been found in a state of disease; and there is no doubt that it is often the effect of uterine irritation acting sympathetically on the brain.

The displacement of the transverse colon in melancholia, observed by Esquirol, Falret, and others; the chronic inflammation of the intestines and lesions of the heart, remarked by Osiander; and of the latter organ by Corvisart, and Albert of Gottingen, in suicides, may either be primary or consecutive on cerebral irritation.

Whatever differences of opinion may exist on these points, this appears clear, that if the lesions observed in the brains of the insane do not indicate exactly the proximate cause of insanity, they are proofs of the seat of it being in that organ.

Jos. Frank and Esquirol confess that they have often failed to find any alteration perceptible in the corpses of suicides; and this is almost constantly the case where the person has killed himself a short time after the propensity has declared itself. The same is observed in all cases of insanity where the patient dies from any accident soon after he has become insane. The maniacal action has not had time to take deep root, and no visible change in the intellectual organ is therefore detected. This is additional testimony which leads to the natural inference, that when morbid changes are discovered in

the brain, they are generally the consequences, and not the causes, of mental derangement.

With due deference to those who have, with so much zeal and labour, investigated by dissection the proximate cause of suicide, it was as likely, in my opinion, to discover by that means why a lunatic imagines himself a deity, an emperor, or a mushroom, as to detect the specific physical cause of a man's killing himself. Accordingly, it appears that the strictest anatomical researches have elicited no other evidence than what corresponds with the general pathology of mental derangement; that is, that the brain presents similar morbid appearances, or, as is the case in those who have died of the most furious mania, there is sometimes not the slightest trace of disease exhibited in that organ, or in any of the viscera of the other cavities.

Sometimes the suicidal propensity has been observed to be simultaneous with the periodical return of the menstrual flux, and to cease when it was fully established; so also when it has been obstructed.

Accustomed discharges of blood from the nose, from piles, or varicose vessels, not occurring at their wonted periods, or having accidentally stopped, have produced suicide. The sudden retrocession of cutaneous eruptions has had the same effect.

To enumerate all the physical or moral sources of this unhappy propensity is superfluous, since it would only be repeating all the causes which can induce insanity.

The causes of suicide are inherent or adventitious, direct or indirect, physical or moral.

They are inherent, when hereditary; adventitious, when evolved in a constitution not previously tainted; direct, when produced by any sudden and sufficiently strong emotion; indirect, when the casual result of previous suffering; physical, when the consequence of fever,

of a previous state of insanity, or of bodily disease; moral, when proceeding from intense grief or mental affection of any other kind, a vicious education, civil or political convulsions, or mistaken impressions in religious matters. These are truisms, and require elucidation only, and not proofs.

Esquirol has remarked,* that suicide is an idiopathic or original, but more often a secondary, affection. There is certainly one strong reason to consider it as idiopathic, since of all the forms of insanity, the propensity to suicide is most susceptible of descending through successive generations, and sometimes influencing whole families, unchanged in character.

Nevertheless, I think it can very rarely be considered as an idiopathic affection; but whether it be so or not, this propensity will yield generally to the same medical remedies as are applicable to insanity generally.

Suicidal delirium may appear under three distinct forms: the first characterised by a profound and concentrated sadness, great depression of spirits, timidity, and anxiety for solitude; the second, by mere *tædium vitæ* or weariness of life, or ennui; the third, by some powerful physical or moral impression which excites a sudden and violent commotion of the passions.

When concentrated sadness is the form, it partakes, in the first instance, more of hypochondriasis; but as that affection is distinguished by a morbid feeling relative to the state of health, when a propensity to suicide comes on, it must be considered as a change of character, and if it do not degenerate into decided insanity, it will often cease with the cause that produced it. Most frequently this species of delirium is hereditary, sometimes the consequence of long-protracted melancholia, but oftener is to be traced to some functional disorder, and is then easier of cure.

* Dict. des Sciences Médic. art. *Suicide*, p. 269.

This condition of the mental faculties may be accompanied with a propensity to homicide or infanticide, as well as to suicide. The manifestations are different, but the physical symptoms in each are the same, and therefore require no distinct exemplifications. The delusion the most prevalent, and which leads to the commission of any of these dangerous propensities, involves often some religious feeling. It may be characterised by gloom and utter despondency, the patient fancying he is doomed to perdition, and is abandoned by Heaven for his sins; or it may be characterised by a sort of solemn elevation, evincing confidence in future happiness, when he fancies that, by the immolation of himself or some other victim, he is ensuring his own redemption, and rendering an acceptable offering to the Deity. The latter feel a kind of beatitude, and seek death in the assurance of future bliss. This form rarely continues, but generally remits.

It seems not the least remarkable among the many paradoxes exhibited in mental derangement, that the fear of damnation is the most frequent cause of suicide; and that those who are impelled by this hallucination are generally the most simple and innocent persons. Reason must be awry indeed, when the pious and the good voluntarily commit an act which they have been taught and believe will receive the very punishment they most dread. Like intellectual cowards who dare not reason with themselves, they rush upon the sin they deprecate.

Despair of Divine forgiveness for real or supposed sins, and the very idea, upon first experiencing confusion of thought, of being so bereft of understanding as to be incapable of discharging the common duties of life, may prompt suicide.

Tædium vitæ, or ennui, often originates in a life too monotonous and luxurious. In this commercial country

it is common in persons of low birth and narrow education, who, becoming rich early in life, retire from the bustling scenes of industry, to enjoy, as they suppose, the fruits of it. In retirement, without occupation, without any intellectual resource, and among those who are strangers to them, they soon feel the listlessness of inactivity. Their spirits then droop, they become very unhappy, and after dragging on for some time a painful existence, their mental faculties become enfeebled; they grow suspicious and irritable; by and by, various delusions are engendered, and none so common as that they shall live to want the means of support, or perhaps that they are already without those means, though possessing a superabundance. Despair succeeds, and the conclusion is suicide.

There is no delusion so common, nor any so strongly indicative of a disposition to commit suicide, as the groundless apprehension of living to want, or that they actually want and must go to the parish for a maintenance. Reasoning here avails no better than against other delusions. Producing the most indubitable proofs of their abundant property is equally useless. When they cannot refute evidence, they deny it, and are exasperated. Darwin says, the fear of poverty has caused more suicides than any maniacal delusion except the fear of hell. I perfectly coincide with him.

Suicide in those oppressed by mere weariness of life seems more the result of reflection. If the propensity be detected, and you reason with them, they will argue, and very subtly, though erroneously, upon the principles which influence them: and as if the act itself were reduced to an absolute theorem, they will sometimes promise to refrain from destroying themselves for a certain time, and have been known punctually to keep their word. Lord S——, afflicted with *tædium vitæ*, promised not to commit suicide before his friend returned, at an ap-

pointed hour. Unfortunately, the friend returned one hour beyond the limited period, and he found Lord S—— had just shot himself. Such examples, however, of good faith in madmen must never inspire so much confidence as to induce any relaxation in precautionary vigilance.

Sometimes the patient makes no secret of this unhappy propensity. At this time a lady is under my care in whom insanity is hereditary. Her case is mania, alternating with melancholia; and when in the latter state, the suicidal disposition comes on. She is perfectly conscious of her condition, reasons upon and laments her extravagant actions or gloomy ideas, and piteously begs she may not be trusted.

The disposition to homicide may be displayed in the same way. I lately visited a respectable woman who became insane about fourteen years ago, during the time she was suckling. She then evinced a strong desire to destroy her child or her husband, both of whom she doted upon. The first attack continued a year. She relapsed several times, and has now been six years in this alternating state. Every return is marked by the same propensity. She possesses so perfect a consciousness of it, that she acknowledged it to me with tears in her eyes, and that she herself ordered every implement to be kept out of her way with which she could accomplish the purpose that is always obtruding on her inclination. In such cases, reason appears to struggle with the delusion, and no doubt, in a degree, controls the propensity. But neither are these reasoning lunatics to be trusted.

Any moral or physical emotion which is capable of deranging the seat of reason may also cause a propensity to suicide, which, as I have before observed, is a mere symptom of a disordered mind.

When suicide is suddenly developed, as in the third form I have alluded to, the execution of its object is

perhaps as rapid almost as the thought. It is consequently much more difficult to meet ; and when suspected, few have the courage to act with sufficient decision to prevent it.

Shame, compunction, or remorse, will prompt a desire to quit this life, from a conviction that the consequences attending the cause of anxiety will entail dishonour. In such person, sorrow, despair, or horror, is portrayed in deep traits on his countenance ; his features are sometimes fixed, sometimes mobile or convulsive ; his manner is sad and touching, or repulsive and abrupt ; and he is generally very restless. The eye becomes injected, hollow, and sunk, but glistening, roving, and wild ; he complains of intense pain, or a sensation like the skull bursting at the forehead, especially about the root of the nose ; there is throbbing of the temples, and distension of the external blood-vessels, denoting determination of blood to the brain ; the head is very hot ; he is restless, and when asleep he has troublous and frightful visions.

Generally there is a great change in the feelings — sometimes more obtunded, sometimes morbidly sensitive. There is also a kind of embarrassment all over the body, which is indescribable, with much perturbation and confusion of ideas. He is subject to great flushings, partial heats, and sweats about the body ; and often complains, though naturally chilly, of universal heat in the coldest day ; and hence has a strong desire to strip off his garments or bed-clothes. These are the uniform concomitants of excessive grief and great mental perturbation.

If any one will take the pains of comparing this description of the sensations which a suicide has complained of previously to committing the rash act, with that which is reported in evidence on the coroners' inquests, a remarkable coincidence will be perceived : pain of the head,

confusion of ideas, and general agitation, are almost always mentioned as having been precursory symptoms.

It is in this condition of the moral and physical faculties that suicide is often committed, though unpremeditated. The impulse is momentary, and if the means accidentally present, they invite the deed, and it is done.

There was recently an afflicting illustration of this state of mind in the suicide committed by a celebrated accoucheur. Depressed and agitated by the melancholy event of a case in which the whole country were equally interested and disappointed, and harassed by an attendance which too painfully reminded him of all the circumstances connected with it, the instruments by chance offered, he yielded to the temptation, and immediately shot himself.

Relatively to the suddenness or recentness of any calamity which produces excessive mental distress, followed by a marked singularity in conduct or conversation, so should the relations and friends be alive to the probability of suicide.

Some have so much control over their emotions that they conceal them from the eye of a superficial observer. But if he who is accustomed to study expression be in doubt, he should place his hand on the heart or pulse of the suspected, and regard the evident constraint on respiration,—and the internal struggle to suppress the exposure of his feelings will be easily detected.

Confidence in the general character and fortitude of individuals under ordinary circumstances, has often led to fatal consequences when they have been placed under extraordinary trials of their feelings. The public had a lamentable example a few years since in an eminent advocate, not less distinguished by great talents and learning than by those virtues and principles which, it

might be supposed, would have enabled him to bear all the ills of this life as a Christian and a philosopher ; yet who could not sustain a domestic affliction, which, however great, is the lot of humanity.

The report on the coroner's inquest regarding this melancholy event affords a most impressive and awful lesson. It, besides, illustrates the state of mind, feeling, and conduct, of a man so eminently gifted, precursory to committing suicide.

It is evident in this case that the cause was excessive grief, and that it was an act, the possibility of which, pending a certain afflicting event which he dreaded, was contemplated ; and that he knew the constitution of his own mind much better than his most intimate associates and medical friends.

In persons of a highly nervous temperament and excessive susceptibility, and where the mind is not regulated by a proper sense of religious feeling, so as to support the ordinary visitations of humanity, a propensity to quit this world when visited by affliction is likely to arise ; but in such constitutions the inclination to the act is oftener the result of impulse than of cool premeditation.

A gentleman, of a family of rank, and distinguished for talent, married, early in life, the object of his most ardent affections. He possesses extreme susceptibility, with a most highly cultivated and refined mind. It may be remarked as a constitutional peculiarity, that his natural pulse does not exceed forty strokes in the minute. When any thing suddenly occurs to agitate him, it produces an attack of fever, and his pulse is accelerated in an astonishing manner. He is then, as he describes, all over pulses.

Though in ordinary affairs a man of firm resolution and great spirit, yet when this paroxysm happens he is seized with such a panic or impulse that he knows not what he does, and he is unnerved for days.

His lady being well acquainted with the infirmities of his constitution, by her good sense and soothing rendered him a happier man than he ever had been. Most unfortunately she died in the first year of marriage. His grief was excessive; and even when time had abated its poignancy, he remained very miserable. His thoughts were always reverting to the virtues of her whom he had lost, and the comparative happiness he had enjoyed in her society.

He tried every thing to divert his melancholy; but those impulses would follow reflection, and then his ideas adverted to self-destruction. He reasoned with himself upon the subject, till he confessed he had become an infidel in religion, and could no longer view the act as wicked.

I had an opportunity of knowing the exact state of his mind during this struggle, from perusing some notes which he had written describing it. He expressed himself with the utmost tenderness and affection in respect to his departed wife, and of his intention of soon joining her by a voluntary death; not, however, in Heaven, but in Elysium!

One night, after having been occupied in reading to some dear relations, and apparently much enjoying the subject, he retired to his chamber. He undressed, and dismissed his valet. His gloomy reflections recurred. One of these strange impulses came over him; he seized a pistol, and discharged it: it failed of effect. He fired another: he wounded himself severely, but not mortally; neither was the effusion of blood great. He then called for assistance. Little constitutional disturbance followed, and the wound readily healed.

It was while confined from the effect of his wound that I was consulted.

I could not in conversation detect the slightest aberration of mind, nor was there a trait in his countenance

of a propensity to suicide. He freely conversed on his past and present situation and opinions ; was perfectly willing to submit to any supervision I might advise, or plan I could suggest, that might divert his reflections, and bring him into a better and happier frame of mind.

By degrees he acquired more composure. He afterwards travelled on the continent for a year and a half. Upon his return he seemed much improved in general appearance, and I thought more so in spirits than he was willing to admit. Nothing, however, has conquered his constitutional susceptibility. The only means of reconciling this gentleman to himself and life is to be constantly engaged in some active occupation suitable to his talents, or, if he could be as fortunate as before, again to enter into the marriage state.

When self-destruction is determined upon, so much cunning is often evinced in effecting it, as defies all the precautions of experience and foresight.

Sometimes there is a real disgust of food ; and sometimes it proceeds from a determination to starve themselves, and it is accomplished by obstinately rejecting nourishment. In either case it is a very troublesome symptom.

The means of attaining their end are matured with a deliberation and art truly marvellous ; and the perseverance with which they endeavour to procure those means is equally surprising.

A woman, named Wild, occupied several weeks in purchasing such small quantities of oxymuriate of mercury as to avoid the suspicion of her purpose. She then administered enough to her three children and herself as to cause the death of all of them.

A gentleman obtained daily one grain of opium for eighty days, under pretence that he could not sleep without it. He then swallowed the whole with the intent of destroying himself.

The following case exhibits some practical points exceedingly worthy of record, and displays besides, in a remarkable manner, the control a lunatic disposed to suicide acquires over himself, his conversation, and conduct, when he wishes to lull suspicion asleep.

In this instance, a most judicious physician and those in whom he had confidence, all experienced in the phases of this wonderful malady, insanity, and its no less wonderful concomitant, suicide, were completely deceived.

A medical friend, travelling over Shooter's Hill, observed a gentleman walking up it, his carriage following him. When opposite to each other, the stranger suddenly fell on his knees in the dirt, and lifted up his hands as if in earnest prayer. My friend stopped his post-chaise at so extraordinary a sight, and soon found by his looks and manners that the poor gentleman was insane. He immediately accompanied him back to London, and placed him under my care till his relations were informed of his state. I afterwards continued in attendance.

The history of the case was this: — The patient was a cavalry officer of rank, aged thirty-five, and had particularly distinguished himself at the then recent battle of Waterloo. On that occasion he had two horses killed under him, and was himself wounded in four places: he was first struck on the crown of his helmet by the splinter of a shell, which wounded the scalp and stunned him; he was next shot through the fleshy part of the thigh by a grape shot, which, at the same time, killed his first horse: from these two wounds he lost much blood. While lying under his second horse, he was pierced in the groin by a lance; and in this helpless condition he received from a French drummer, who was rifling the dead and dying, a violent blow on the temple from the butt-end of a musket, from the effects of which he remained some time insensible. He was afterwards con-

veyed in a most deplorable state as a prisoner within the French lines ; and though released the same evening by the victorious allies, a long while elapsed before his wounds and exhausted condition received any attention.

He inherited a predisposition to insanity, and was naturally reserved, diffident, and taciturn, but affectionate and generous.

When he recovered from his wounds, he often complained of pains in his head ; and it was observed that his temper became fretful and suspicious, that he slept ill, was depressed in spirits, and courted solitude. These symptoms increased latterly. At length he imagined himself the sport of his brother officers, and many other delusions arose.

There was a moral cause likewise operating, which, on a constitution that had recently received so severe a shock, no doubt greatly influenced his disorder. He had applied for promotion in consequence of his sufferings in the service. This was withheld, as he thought ungraciously, and too long ; and when he was raised a step, his mind was already too much disturbed duly to appreciate it. The anniversary of the glorious battle of Waterloo was just passed, and the recollection of it was painful to him.

In this state he came to town, as I have described.

He was exceedingly sober and temperate by habit ; but dining the day before with a brother officer, he was persuaded to commit an unusual excess in wine, with the hope of raising his spirits.

This proved a match to the mine. It exploded ; and his intellects became completely deranged.

I found him with his countenance very wild, the eyes injected and pupils contracted, pulse quick and weak, tongue white, and great thirst. He had had no sleep for five nights. Sometimes exalted, violent, and loquacious ; sometimes depressed and taciturn. He was

rather languid, which I imputed to his having within the last hour lost full twenty ounces of blood from the rupture of an hæmorrhoidal vessel.

It is not necessary to detail the medical treatment adopted, but I will proceed to those points in the case which are relevant.

He was placed in lodgings with a careful attendant. In about three weeks he was nearly well, when, unluckily, a whitlow formed on his finger, and as one of his delusions was, that he was rotten in every part, it was the cause, besides pain, of considerable irritation, and it broke his rest. Other of his delusions returned, but subsided with the pain of the whitlow; and he again greatly improved.

In six weeks he was so well that I took my leave, advising him to travel during the remainder of the autumn. The next day some domestic occurrence occasioned violent irritation, and he again relapsed into despondency, unattended by paroxysms of violence; but he shortly recovered.

However, instead of going into the country and varying the scene, his lady brought him into town, and permitted unrestricted intercourse with his relations, &c. He grew worse, quarrelsome and suspicious, and very low-spirited, and began to accuse his wife. I then earnestly recommended that he should be completely separated from all intercourse with her and his connexions; but my advice was disregarded.

A boil now formed *juxta anum*. This irritated him more than the whitlow, and his delusions about his rotteness were more prominent than ever; but when the boil suppurated and discharged, his mind again improved.

No persuasion could induce his friends to give him exercise or diversion, or to change the scene. He therefore sat all day brooding over his fantasies, and reading religious books; for now there was added to his delusions

an impression that he was very wicked, and had neglected his religious duties. His face, too, assumed the suicidal expression.

A month afterwards a consultation with two eminent physicians confirmed my opinion of the treatment to be pursued. But, notwithstanding this consultation, all remedial aid was neglected, and he was allowed to follow his inclinations both in religious matters and in totally secluding himself. In about three weeks all the symptoms were so much exasperated that he was sent to a private asylum.

A few days afterwards, while walking out, he tried to drown himself, but was rescued by his keeper. He continued in this desponding state some months, when, rather suddenly, he appeared much better; and continuing to improve, his physician thought him well, and he returned home. Two days only had passed, when he called on the same physician, acknowledged that he was as bad as ever, and entreated earnestly that he might again be received into his house. He was so on that day. The next he poisoned himself and died.

It proved that he had never abandoned the desire of committing suicide; but he so well concealed it and otherwise conducted himself, as to lead to the conclusion that he was recovered. It was in fact a scheme, the sole object of which was to get out and buy laudanum. Having procured a sufficient quantity, but anxious to save his wife the agony of witnessing the act he meditated, he preferred returning to the asylum to execute it!

Suicides will sometimes keep a diary of their sensations, reason on their motives and the different kinds of death which offer to their choice, and make their will with the strictest regard to equity. Although they endeavour, yet they rarely conceal in these memoranda their delirium, and the despair which moves them.

Abroad, we not infrequently hear of double or mutual

suicides ; for example, when two lovers meet with an obstacle to their union, they resolve to unite in a voluntary death. Such incidents are rarely met with in England : its inhabitants are not yet romantic enough for these exhibitions. How are we to designate the state of such minds ? I know not whether to call them lunatics or fools. Certainly they are not Christians.

Causes that appear very trivial, and which in persons of strong nerve and sense will never disturb the mind, in the weak and vain act as powerful incitements to suicide. Thus, the loss of personal charms is a fertile source of suicide among French women, if we may credit Georget and Falret.

Like the other concomitants of deranged intellect, suicide sometimes assumes a periodical or intermittent type, and is apt to recur on slight causes, and after many returns to become habitual ; but in such instances there is a strong hereditary predisposition.

It were superfluous to adduce cases to illustrate all the various lesions in the physical and moral condition of man which lead to suicide : they are abundantly quoted by every author who has treated of insanity. To gratify the depraved and prurient taste of the public, the daily journals abound with all the modes and most minute details of self-murder. From such ample sources the philosophic as well as the idle inquirer may be fully informed, and the memory be stored with every species of suicide which the illusion even of a deranged mind, or exalted or morbid sensibility, can furnish.

When the determination to commit suicide is fixed, although in general the utmost care is evinced to conceal the intention, yet many indications betray the secret. From mere melancholy, the patient becomes more morose, gloomy, and taciturn. He looks askance with an eye of indescribable anxiety and suspicion, as if fearful lest his secret should be penetrated, and he shuns observation

with tenfold care, by retiring into the most secluded places. His features are immovable, his face lead-coloured or jaundiced, he sighs deeply, and rarely rests. He is then ripe for executing his intention.

When suicide is designed as a sacrifice to revenge or disappointed love, or the vanity of a striking *finale*, the resolution is often displayed by a change from all the former appearances of despair to an air of forced satisfaction. There is a transient animation, a hurried and vacillating manner, doing and undoing all day; the face has a hectic flush, the pulse is quicker, respiration is increased, and the patient is sleepless. There appear strong marks of cerebral excitation. In fact, he is only watching to put his purport into execution.

The shades between these two extremes are manifold; but they are conditions, which, when observed in those whose mind we know or suspect to be disturbed, should warn us to be guarded against some sinister attempt.

Whenever a propensity to suicide has once been developed, it behoves us to recollect the probability of its recurrence. A fresh paroxysm is easily renewed by affliction, or chagrin, or derangement of health; and whenever the train of symptoms just described manifest themselves, though no positive delirium be betrayed, every precaution is necessary to remove the cause, if it be a moral one; and if it be a physical cause, the preventive means, which common sense will suggest, must be adopted.

When melancholia has long continued, it seems concentrated, and a propensity to suicide is then often developed. It is, therefore, in such case, a secondary, and not a primitive, affection.

When it is the consequence of some profound moral impression, unless mania be immediately elicited and impels the instant act, the propensity to suicide is generally combated for a time. The degree of resistance

to the impulse depends on the moral man: most yield with little opposition; but sometimes either conscience or reason prevails, and the inclination is surmounted. But if he fall not by his own hand, the struggle often ends in profound melancholy. He then becomes taciturn, morose, pusillanimous, mistrustful, or apathetic; or he may be so irascible that every fresh object is a torment to him; he fancies he is despised and deceived, and he seeks to hide himself from the world.

At other times, the melancholic meditating suicide betrays an indescribable anxiety; the association of his ideas is horrible, despair is painted in his immovable features, the eyes are hollow and sunken, the conjunctiva is yellow like the skin, and often highly injected with blood. In this state, should opportunity present, let the means be what they may, he embraces death.

Generally, however, this is a point of much and calm deliberation; and he will revolve in his mind the means which are the easiest, as well as most accessible; and commonly, he will select those the most prompt and least painful. But when the choice is not open to him, he will adopt the most ingenious plans, and persevere with the utmost patience, in accomplishing what he has fixed upon.

Some meditating suicide, from a horror, perhaps, of shedding blood, will carefully select a mode of dying which shall not violate that feeling; and this motive will sometimes induce them to defer the act till it can be executed according to their predilection.

Suicide unquestionably is a variety of melancholia, though it is often complicated with, and is sometimes the sequel both of mania and hypochondriasis, and even of fatuity. But in the latter case, it follows on repeated attacks of melancholia with weariness of life; and when thus complicated, the mind is so alienated that it can scarcely be considered the act of volition.

When reason is entirely awry, the acting up to the specific hallucination entertained is the sole object the patient has in view: regarding the means only, and not the consequence, he may jump from the house-top because he imagines he possesses the power of flying, and be killed; another leaps into the water, fancying he can walk on its surface, and is drowned; or, in the delirium of fever, the patient may step out of a window, not distinguishing it from a door, and break his neck. Such are not acts of suicide: the person is in a real delirium, and misjudges both the means and the end.

The propensity to self-destruction is sometimes developed in a maniac from some fanatical religious hallucination or imagined supernatural inspiration. He may conceit he hears a voice calling upon him to sacrifice his own or another person's life, as an expiation; or that he has been visited by some blessed spirit or evil demon who commands it; or that he has some high destiny to fulfil, which prompts him to acts that inflict death. Self-destruction or homicide is not then the act of the will, and therefore can be deemed neither genuine suicide nor murder. The commission of suicide, except impelled by some violent and sudden cause, implies reflection and consciousness. It may proceed from a propensity long existing and cherished, or from a sudden impulse; but whether of old or recent date, whenever an hallucination of this sort is displayed, such patients demand the most vigilant watchfulness, lest they attempt to effect the destructive object to which their disordered minds are propelled.

Errors and changes in matters of religious faith are most prolific sources of mental delusion and despondency (see Part I. Comm. II.), and consequently of suicide. The phrenzy of misplaced zeal, however, is not always limited to individuals, but seizes sometimes on multitudes, and produces epidemic suicide.

Irreligion is a frequent source of suicide, true religion never.

A Christian who believes in the rewards and punishments of a future life, and rushes deliberately into the presence of HIM by whom his conduct in a future as well as this state is to be judged, cannot be of sane mind when he commits an act which is in itself an heinous sin. But he who has no belief in a future state, and voluntarily sacrifices life to escape the punishment due to his delinquency, may commit suicide, and yet possess his intellects entire; for the only consideration with him is to die and quit the scene of his calamities.

A soldier may devote himself to certain death by leading a forlorn hope in battle; but he is prompted by the *amor patriæ*, the love of personal glory, or a sense of duty. This is the emanation of enthusiastic courage, not of insanity.

But what is more relevant, a lunatic may entertain a specific delusion, and emulate the fast of forty days, and consequently die of famine; or adopt a penance, or inflict severe personal injury, as an expiation for some imaginary sin, and in its execution fall a voluntary sacrifice. In these cases, the motive is not a desire to quit life, but to acquire canonization in this world and immortality in the next. Three cases have occurred in my practice where the unhappy lunatic emasculated himself; but it proved fatal in no one. Matthew Lovatt, the Venetian shoemaker, first emasculated himself under some fanatical delusion. He recovered from the effects of this mad act. Afterwards he exhibited himself affixed to the front of his house, crucified, and crowned with thorns! Such acts may be those of a distempered mind, but they are not acts of suicide.

I consider that a real act of suicide must be the impulse of a morbid operation of the functions of the brain. The actual condition of the mind under such a dreadful

impression I shall not attempt to unravel. We may presume with the poet, that

Between the acting of a dreadful thing
And the first motion, all the interim is
Like a phantasma, or a hideous dream :
The genius and the mortal instruments
Are then in council ; and the state of man,
Like to a little kingdom, suffers then
The nature of an insurrection.

Some meditate their exit from this world by any means rather than their own hands. They will perpetrate a murder which they calculate will forfeit their lives to the offended laws of GOD and man, and yet in selecting their victim prefer one who, from perfect innocence, they conceive will find admission into heaven !

— Deans meditated the murder of a young woman to whom he was attached, because she rejected him. It appeared that he intended to commit this act because he was weary of life without her, rather than from a desire of revenge. Conceiving, therefore, that the sacrificing of an infant would be less wicked than killing a young woman who might have crimes to answer for, and an opportunity offering, he seized a child of four years old and cut its throat. Many murders have been perpetrated from a similar motive. I will quote one, as it still more forcibly illustrates this extravagant self-delusion : —

“ About fifteen years ago a schoolmaster, residing in the north of the State of New York, perpetrated a similar murder. His fanaticism was still more extravagant. He thus reasoned : — if I die before I am well prepared, I shall doubtless go to hell ; to avoid this terrible misfortune, the safest way is to get myself hanged : I shall at least have time to repent before my execution. To accomplish this I must commit a premeditated assassination, for our laws are so mild, that any less atrocious act will only subject me to a few years’ imprisonment. But how

must it be done? If I kill a sinner I send him straight-way to hell. I must, therefore, kill a young person whose innocence will be a guarantee to me of his eternal beatification! Upon this he took his gun and shot a child only three years of age, and afterwards went voluntarily and delivered himself into the hands of justice. Care was taken to fulfil his desires. This fanatic belonged to the sect called Methodists.”*

I knew one, and have heard of two other persons, who destroyed themselves upon returning from the funeral of a friend who had committed suicide. We often hear of such acts committed *instantly* by low and illiterate people, who appear so to have done on the most trivial motives.

Some leave a sort of apology for the act:—The Sieur Gillet, aged 75, hung himself; and near him was found, in his own hand-writing, the following apology for the deed he had accomplished. “Jesus Christ has said, that when a tree is old and can no longer bear fruit, it is good that it should be destroyed.” He had previously several times attempted his life.

It would be equally as vain to attempt tracing all the modes adopted to effect suicide, as to account for the motives prompting it.

Without referring to the ancients or the dark ages, many instances occur in modern history of propensities to homicide and infanticide, as well as to suicide, which appear to result from no other cause than the force of example.

In a late sitting of the French Academy of Medicine, several examples were reported by MM. Barbier, Marc, Bricheteau, Esquirol, Villermé, Bally, and Costel, completely establishing this fact. Esquirol† mentioned six

* This case was published in the Gazette de France, as a commentary on the murder committed by Deans.

† Medico-Chir. Journ. vol. ix. p. 226.

cases occurring of persons being seized with the propensity to destroy their children since the trial of Madame Cornie for that crime. Costel related, in illustration, the more remarkable circumstance which occurred at the *Hôtel des Invalides*. A soldier having hung himself on a post, his example was followed in a very short time by twelve other invalid soldiers; and when this post was removed, the suicidal epidemic ceased.

A gentleman told me that when at Malta, a few years after that island was taken possession of by the British, suicides became alarmingly common in a particular regiment. Every means was tried in vain to put a stop to it. At length the commandant resolved that the body of the next suicide should be denied Christian burial, and be treated with every indignity. The opportunity soon offered. Another suicide occurred. The regiment was drawn out, the corpse was stripped naked, placed on a hurdle, and dragged with every mark of ignominy, and thrown into the fosse. The effect was the same as upon the Milesian virgins and the French invalids,—there were no more suicides. This may be cited as an instance of epidemic *tædium vitæ*.

Primrose relates, that the women of Lyons were seized with a propensity to suicide by throwing themselves down the wells of that city.

Thirteen hundred people destroyed themselves at Versailles in 1793; and in 1806, epidemic suicide was rife in Rouen during the months of June and July, when sixty destroyed themselves. In 1813, in the little village of St. Pierre Monjau, in the Valais, one woman hung herself; many others followed her example; and had it not been for the interposition of the civil authorities, the contagion would have spread.

There is also a favourite method or a fashion in the choice of death sometimes prevailing.

When a person of note has rushed on a voluntary

death, the majority of succeeding suicides will be marked by the selection of a similar instrument or mode of immolation, whether it be a halter, a pistol, a razor, or by drowning, or by asphyxia from the fumes of carbon, which is now common in France. When this obedience to example is exhibited, it almost suggests a doubt whether the seat of reason is so greatly disturbed as to exempt the suicide from the onus of responsibility.

There is even a national taste in these matters. If the English are addicted to shooting themselves, the Prussians are still more so to hanging. The French, who are fond of effect in all things, shew it even in this last act, and prefer making an exit from some elevated or conspicuous place, such as a high column or monument, or a bridge,* and the time mid-day, and in the presence of a multitude. This is the *ne plus ultra*, and gives great eclat to the character of the suicide.

Even murderers have their peculiar tastes in executing their dreadful deeds. The atrocious Williamson attacked unsuspecting and defenceless persons in the dead of night, and beat out their brains with a poker or bill-hook. The murders of Mr. and Mrs. Bonar, of Mr. Perkins and his housekeeper, of Mr. Parker and his housekeeper, and of various others which have followed in rapid succession, were all perpetrated, and by different persons, under circumstances very analogous, and with similar implements.

The French physicians quoted above, were inclined to ascribe the cases they adduced of imitative suicide to physical disorder, which they thought an indispensable pre-

* A friend, the summer before last, was walking at noon with two gentlemen over the Pont de Jardin des Plantes, at Paris, when a man passed them at a quick pace with his coat and waistcoat on his arm. As soon as he came to the centre of the bridge he suddenly threw these clothes into the river, and immediately jumped over the balustrade, in the presence of a crowd of people, and was drowned before assistance could be rendered. Instances of public suicide are not rare in that city.

liminary condition to this propensity. But if corporeal derangement were an essential preliminary, what stopped its effect? Could the impulse of a morbid physical action be checked at discretion? Could the removal of a post produce such an effect on the French invalids, or the indignity shewn to a dead comrade operate in the same manner on British soldiers, if these suicides had a physical origin? I am inclined, therefore, to retain my opinion, that there is frequently much of vice* and caprice too, even in the commission of so awful an act as suicide.

Instinct teaches children self-preservation, reason the adult; but in the decline of old age, both instinct and reason being deteriorated, life at that epoch is often voluntarily ended without cause or motive, as we see in that form of mental derangement denominated senile insanity or delirium. But even in infancy, the impulse of nature, which we call instinct, is sometimes overleaped, and children as young as ten years of age have destroyed themselves.

Harriet Cooper, of Haden Hill, Rowley Regis, aged ten years and two months, upon being reproved for a trifling indiscretion, went up stairs, after exhibiting symp-

* A reviewer of my Inquiry, &c. (see *Eclectic Review*, Aug. 1820), deems me harsh for speaking of suicide generally as a vice, and conceives that I could have only admitted the principle by a *lapsus calami*. To judge every act of self-destruction to be criminal when reason is shoved from her seat, would be both unphilosophical and unfeeling. I admit it would be as improper to call a lunatic who has committed this violent act vicious, as it would be to arraign a beneficent Providence for the consequences of our own imprudence. When a lunatic commits suicide, no institute, divine or human, is broken. The act is not in the scale of moral offences, and the law throws a veil over it. But it becomes a real vice when it assumes the type of an epidemic. It is then the effect of imitation: those who fall into it may be weak and wicked, but it is not the result of that physical disorder of the intellectual faculties which is the essence of insanity.

toms of grief by crying and sobbing, and hung herself in a pair of cotton braces from the rail of a tent-bed. A girl named Green, eleven years old, drowned herself in the New River from the fear of correction for a trivial fault.

The act here may be voluntary ; but in all such cases, it is the mere impulse of childish passion or fear of corporeal punishment ; and the question of insanity, in my opinion, cannot be mooted. For, to constitute insanity, the perfect faculties of reasoning and reflection must pre-exist ; and in children so young, such precocity of those faculties is not probable. Neither the physical nor moral condition of the faculties at this age can be sufficiently developed to produce the delirium impelling suicide. Evasion of present consequences, without consideration of the future, alone prompts the deed.

The jurisconsult has not contemplated suicide in infancy. Virtually and strictly it is *felo de se*. But the mind which is supposed in that case to will the act, not having attained the maturity for judging, cannot physically, nor perhaps legally, be pronounced capable of committing self-destruction.

No doubt, education may influence the propensity to suicide : among the ignorant and children, the want of education perhaps is a source of it. But the dispositions of children differ so much, that excessive indulgence or severity may equally produce the same effect. The newspapers often relate instances of mere children destroying themselves without motive, except from contradiction, mere chiding, or the fear of corporeal punishment. The same dispositions in maturer age, meeting even the ordinary mortifications in life, soon give way, and precipitate their fate. Falret says, that in adolescence the indefiniteness of passion is one cause of melancholy with intolerance of life.

Many instances of children hanging themselves in a

wanton frolic have happened, without a thought of killing themselves. Such acts must not be recorded as suicides.

Mania and melancholia are hereditary ; but melancholia may beget mania in the next generation, and mania melancholia ; but the propensity to suicide will propagate its own type through successive races.

I have had several members of one family under my care where this propensity declared itself through three generations : in the first the grandfather hung himself ; he left four sons ; one hung himself, another cut his throat, and a third drowned himself in a most extraordinary manner, after being some months insane ; the fourth died a natural death, which, from his eccentricity and unequal mind, was scarcely to be expected. Two of these sons had large families : one child of the third son died insane, two others drowned themselves, another is now insane and has made the most determined attempts on his life.

Several of the progeny of this family, being the fourth generation, who are now arrived at puberty, bear strong marks of the same fatal propensity.

None, I believe, of the children of the fourth son, of the second generation, who died a natural death, have manifested this predisposition.

Climates and seasons have been supposed to exercise a great influence on the number of suicides. As far as relates to climate, this is an obvious error. All the same causes, physical and moral, which elicit insanity generally, will likewise produce the propensity to suicide. The best barrier to its rise or progress every where is a sound education, and that practical morality which is founded on pure religion. Periods of great scarcity and distress, and sudden revolutions, political or religious, are always active and universal agents in originating insanity ; and consequently propagate a desire

of self-destruction : when urged by such causes, all other considerations are forgotten, and the victims of suicide will multiply.

In respect to countries, more suicides take place in the colder countries of Europe than in the hotter. For instance, in the summer of 1806, three hundred persons at Copenhagen, out of a population of 80,000, committed suicide; and at Berlin, since 1819, out of a population of 170,000, five hundred immolated themselves in six years and a half; while at Naples, according to the census of 1826 containing 349,000 inhabitants, there were only seven suicides. In the whole of Spain, it is stated, that there were only sixteen suicides in 1826.

The seasons, however, very much influence suicide; for I find, on examining and comparing two tables of suicides, one kept at Westminster from 1812 to 1821 inclusive, the other at Hamburgh, from 1816 to 1822 inclusive, that in both cities suicide is at the maximum in July, and at the minimum in October. But if the whole year be divided into quarters, it will be seen that more suicides are committed in Westminster in the first three months than in any other quarter: in Hamburgh, the number in each quarter does not vary so much.

At Rouen and Copenhagen it also prevails in June and July in a much higher degree than in any other month of the year.

The number of suicides in Paris, from 1817 to 1826, amounts to 3185. The average of these as to the months is:—

January	213	July	301
February	218	August	296
March	275	September	248
April	374	October	198
May	328	November	131
June	336	December	217

The average as to the seasons is:—

Spring	997
Summer	933
Autumn	627
Winter	648

It will be observed, that this account seems to controvert the inference, that suicide prevails most in the hottest weather; for the excess is in the spring quarter and month of April. But if Paris resemble London, the fact that suicide prevails most at the hottest season, will still not be doubted. The fact is, that the population in the former as in the latter is always infinitely more numerous in the spring. There are three-fourths more of the upper and middle ranks residing in London in the spring than in the other quarters, and consequently there will be more suicides to reckon in the vernal season.

There is no question that temperature has a marked effect in producing insanity, of which suicide is a feature. It has been satisfactorily ascertained, that when the atmosphere is about 80° Fahr. the propensity to suicide is most prevalent in all temperate regions.

November hitherto has borne the reproach as most conducing by its gloominess to despondency, despair, and suicide. This month proves, in Paris as in London, to produce the fewest of these afflicting events.

Although, as I have before observed,* I believe that the increase of insanity is not greater than the increase of population, yet I do not hold the same opinion in respect to suicide. There is too much reason to conclude that it is increasing in England, as it is to a greater and frightful extent in many other countries; and for reasons which I shall presently state, I fear that it will still further augment.

* Inquiry, &c. p. 93.

I have refuted elsewhere* the absurd and long-attached opprobrium, that suicide prevailed more in England than in any other country. God knows it is still too common; but there is proof that this propensity prevails in a much higher degree among other nations.

Mr. Kamptz, of Berlin, in a statistical work founded on official returns, reported the proportion which the suicides bore, in 1817, to the population of the following cities; to this I added the decimal proportion to every thousand inhabitants, and formed a Table of the results,† which I here republish:—

THE PROPORTION OF SUICIDES TO THE POPULATION OF VARIOUS
CITIES, IN 1817.

	<i>Suicides.</i>	<i>Population.</i>	<i>Proportion.</i>
Berlin.....	57.....	166,584.....	or 0·34 in 1000
Potsdam (exclusive } of the military).. }	77.....	15,426.....	or 4·99 in 1000
Frankfort on the } Oder	41.....	12,500.....	or 3·28 in 1000
Breslaw	58.....	63,020.....	or 0·92 in 1000
Leignitz	37.....	10,000.....	or 3·7 in 1000
Reichenbach	56.....	3,500.....	or 16·6 in 1000
Magdeburgh	50.....	27,869.....	or 1·79 in 1000
Merseburgh	39.....	6,000.....	or 6·5 in 1000
Dusseldorf.....	24.....	15,000.....	or 1·6 in 1000
Totals.....	439.....	319,899.....	or 1·36 in 1000

The proportion of suicides in Copenhagen, Paris, and London, was,

	<i>Suicides.</i>	<i>Population.</i>	<i>Proportion.</i>
Copenhagen	51.....	84,000.....	or 0·6 in 1000
Paris†	300.....	700,000.....	or 0·42 in 1000
London	200.....	1,000,000.....	or 0·2 in 1000

The proportion of suicides, therefore, in the capitals

* Inquiry, &c. and Lond. Med. Repos. vol. iv. p. 441.

† Inquiry, p. 92.

‡ The number of suicides in 1826 had increased in Paris to 511.

of Paris, Berlin, and Copenhagen, was, in 1817, in relation to that of London, as 5 to 2, 5 to 3, and 3 to 1.

In Copenhagen, the increase of suicide in twenty years was rapid beyond comprehension, and had arrived at an enormous height, viz.

From 1787 to 1790	181
1790 to 1795	209
1795 to 1800	261
1800 to 1805	319

This greatly exceeds the increase of population of any nation.

It appears happily to have diminished to fifty-one in 1817.

In Paris and Berlin, the number since 1817 has augmented; and likewise in London, though not in a ratio equal with the population.

Professor Casper has published a curious retrospect of the causes of the suicides committed in the last six years and a half in Berlin. The total was five hundred. He thus arranges them:—

Offended honour	14
Mental alienation.....	61
Drunkenness and dissipation	54
Dread of punishment.....	32
Debts and domestic trouble.....	18
Love	12
Matrimonial strife	11
Disgust of life	3
Disease and pain	12
Religious excitement	1
Unknown causes	282
	<hr/>
	500

It may be objected to this enumeration of the causes of suicide, that more than half the number are unaccounted for; but I also object to the other moiety, that little reliance generally can be placed on the previous

history of the suicide, and that in most cases none at all can be obtained.

The modes of quitting life which the individuals are said to have selected, if correct, may offer to the moralist subject for reflection. They are thus reported : —

By hanging.....	234
Shooting	163
Drowning	60
Cutting their throats.....	17
Stabbing	20
Throwing themselves out of window	19
Poison	10
Opening an artery	2
	<hr/>
	525 *

Women are less disposed to suicide than men. In England, France, and Germany, the proportion of the former to the latter is about one in three. At Boston, in America, it is nearly the same. The disproportion, therefore, between the sexes, is much greater than in common insanity, without the suicidal character.

Unfortunately, my means of information do not enable me to prosecute this interesting inquiry; for it might be useful in a political as well as a moral point of view, to investigate the causes of the great difference which obtains in the prevalence of suicide in different countries and cities.

Independent of all those sources of misery and despair common in the revolutions of all states, local causes often operate to multiply suicide in particular places.

There is another and still more influential cause, though unnoticed, of the increase of suicide, and that is, the rapid and immense increase of periodical journals. There are few persons now comparatively in this country who cannot read, and the means of so doing is amply

* There is a difference of twenty-five in the totals.

supplied by a teeming and cheap press. As the eagerness for this species of gratification has augmented, the public taste has become more vitiated and debased; and hence, nothing is found so attractive as tales of horror and of wonder, and every coroner's inquest on an unhappy being who has destroyed himself is read with extraordinary avidity. Not content with domestic horrors, we see our most respectable diurnal papers industriously selecting from every foreign source these lamentable proofs of the degradation of humanity, and dressing them in colours to excite commiseration rather than the abhorrence of Christian feeling.

Who can doubt that the frequency and general diffusion of these reports familiarise the mind of the lowest ranks with suicide, and thus diminish the detestation which ought to be felt at the mere contemplation of acts so repugnant to God and derogatory to man.

The increase of suicide, I am convinced, is mainly attributable to these causes. Were this offence to be less noticed, it would be less frequent.* I believe, too, that the increase of crime has a similar origin. What induces more to first offences than ludicrous police reports of criminal acts, or scenic representations of successful vice?

The daily circulation of suicides, through the medium of the daily papers, also operates in another way to their repetition. No sooner is the mind disturbed by any moral cause, than the thoughts are at once directed, through these channels, to meditate an act, which otherwise, neither predisposition, despair, nor the nature of

* The reasoning of a young woman, who was rescued from a desperate attempt at suicide, confirms this opinion: upon being questioned how she came to commit so dreadful an act, she replied, "that she knew other people killed themselves when they were miserable, and she did not know why she should be prevented from terminating her existence."—*Times Newspaper*, Dec. 3, 1827.

their insanity, would have suggested. Hence, when the mind is only beginning to aberrate, it is a very essential precaution to prevent such persons, as well as all in whom there is a propensity to suicide, from reading newspaper reports; lest it should beget in them the disposition, and also teach them the various modes of successfully accomplishing their own destruction.

The means of obviating these inciting causes to suicide are not within the province or power of the physician. The reformation of them can only result from practical experience of their fatal effects.

Where the desire of suicide is the result of continued mental derangement, no fear of punishment in the next world will deter the act; and to endeavour to check it by any indignity shewn to the corpse, would be equally unavailing. It is only where epidemic suicide prevails that such proceeding might offer a check.

No bar, in most cases, I suspect, can be interposed but the fear of God, and the avoiding of the moral causes which provoke insanity.

Treatment of Suicide.

The medical treatment of the propensity to suicide, whether prophylactic or therapeutic, differs not from that which is applicable in cases of ordinary insanity. If suicide be the accompaniment of mania, or of melancholia, the remedies must be such as are suitable to those states of mental disorder, without reference to this specific symptom. The only difference is this, that in cases of insanity, when marked with violence, the precautionary means are to prevent mischief to others, and, when marked by disposition to suicide, to protect the patient himself; and that in the latter case, a much greater degree of vigilance is necessary.

Few have recommended any particular remedies for suicide. Avenbrugger, however, prescribes cold water

almost as a specific in such cases. He makes the patient drink a pint every hour, and if he continues pensive and taciturn, he desires his forehead, temples, and eyes to be sprinkled with it, till he becomes more gay and communicative ! His feet, during the aspersions, are to be wrapped in warm flannel. Hufeland, also, has prescribed water internally as a remedy in mania.

He who is intimately acquainted with those impressed with this fatal propensity, knows how obnoxious they are to curative measures, and that to make them drink even cold water, in general would be impracticable. And if the patient were sufficiently tractable, reason is against relying on such inert means.

When the symptoms of cerebral vascular excitation are apparent, the same reasons obtain for shaving the head, moderate abstractions of blood from the cerebral vessels by cupping or leeches, refrigeration, and purging, as are indicated when those symptoms predominate in cases of pure insanity. I have seen more decided good effects in incipient cases with propensity to suicide, from emetics, than in any other variety of insanity ; and where the biliary functions have been suddenly disturbed, and the excretions indicate a morbid action of the liver, a dose of calomel combined with, or followed by some brisk cathartic, will sometimes at once remove the depression of spirits, and even mental aberration tending to suicide.

Warm bathing also daily, and prolonged for an hour or more, and at the same time cold applications, or water poured on the head by a slight *douche*, when there are signs of considerable cerebral excitation, are very useful. Narcotics, where there is little or no sleep, may be prescribed, with the precautions which I have already advised (see p. 405).

The occasional instant relinquishment of the purpose of suicide, and a returning wish for life, exhibited in persons who have attempted it and failed, is a circum-

stance worthy of regard. I have seen many instances of this change of purpose, especially in those who have in the attempt lost considerable quantities of blood. It especially occurs in those who divide the veins conveying blood from the head. The question in these cases is, whether the removal of the desire of suicide be the effect of depleting from the blood-vessels returning from the brain, and thus lessening cerebral irritation? or whether it be the moral effect produced by a sudden repentance of the act they have contemplated and were so near executing? It cannot be denied, as various authors have shewn, that incidents suddenly interposing just at the moment the attempt is about to be made, have not only frustrated, but altogether dispelled the design. Here the preventive means, though sometimes physical, or sometimes purely moral, produce analogous effects.

Reasoning upon these facts, two distinct modes of endeavouring to remove the propensity to suicide, or, in other words, to cure the cerebral disorder which prompts the propensity, present themselves. The one, by relieving the oppressed circulation of the brain by timely and proper abstractions of blood; and the other, by devising means which may have a sudden operation on the sensorium.

I can with confidence pronounce, especially where the propensity has originated in excessive grief, that timely abstraction of blood, either locally from the head, or generally from the system by very moderate venesection, in a majority of incipient cases, not only relieves the urgent symptoms, but also suspends the propensity to suicide.

The following case is not exactly apposite, but it will prove the good effect of the loss of blood from the head during the existence of a delirium which had caused the attempt on life to be made, and which did

not cease even after resuscitation from suspended animation.

A gentleman, of a very irascible and impetuous disposition, with whom I was intimate, experienced, in a public meeting, a rebuke which mortified him exceedingly, and made so deep an impression that he was quite miserable. At night, instead of going to bed, he roamed abroad; and at length, early in the morning, without knowing whither he went, he found himself near a sheet of water. The view of it at once determined him to drown himself, and he plunged in. The action was perceived, and he was rescued from the water insensible, and immediately conveyed where proper means to resuscitate him were adopted.

As his address was fortunately in his pocket, his family were sent to. A messenger required also my attendance. When I arrived he was still insensible, but animation was returning. As soon as it was proper, he was dressed, put into a coach, and I accompanied him to his residence. As yet he had not spoken, nor apparently observed any thing. The motion of the carriage on the stones seemed to rouse him, and he looked about him. He neither knew a relation who was present, nor me. Presently he became rather violent, his eyes were very wild and ready to start from their sockets, his face became flushed, the vessels of the forehead were excessively distended, and all the symptoms of genuine delirium came on. He vehemently apostrophised me all the way home as Dr. Death, as if partly recollecting me and partly the event which he had been seeking.

Ascribing this vehemence and the symptoms of excitation to the violent re-action in the vascular system from the state of collapse it had sustained, I immediately ordered the oppressed vessels of the head to be relieved by the application of cupping-glasses and the abstraction

of sixteen ounces of blood, the head to be kept cool, and the injection of enemata till the bowels were well cleansed out. After these operations he soon became passive and disposed to sleep. He slept six hours, and awoke tolerably composed, but not quite coherent. He took light nourishment, and at night awoke perfectly collected, but exceedingly low. The next day he was well, but languid. An explanation was given him which took away the offensive part of the speech which had so affected him, and he by degrees recovered his usual state of mind.

Remembering that some authors had advised submersion as long as it could be borne, as a cure for insanity,* I looked with some curiosity for the effect it might produce in this case, where it was carried to the complete suspension both of the sensorial and intelligent powers. The event here did not justify the practice.

Melancholy patients, it is said, have had the morbid association of their ideas broken, or long-continued hallucination chased away, by exciting some sudden and violent emotion.

I have never had the temerity to try the effect of surprises or fright; and I would advise those who are fond of such experiments, before they practise them on the insane, attentively to consider the state of the patient, especially that no cerebral congestion exists, lest apoplexy should close the scene.

It is right, however, to mention, that there are many credible accounts of accidents happening to persons about to commit suicide which have affected them so much as to occasion a re-action, powerful enough to supersede the propensity and reconcile them to life.

Pinel speaks of a melancholic who went with an intent to drown himself; and being attacked by robbers,

* Van Swieten, Comm. in Boerhaave, § 1127.

he was so alarmed that he forgot his horrible purpose, and never had a return of the propensity.

A woman entertaining the same design, as she passed along, a vessel of water accidentally fell on her head. This incident occasioned such a fright that she forgot her project, and returned home trembling, and never thought of suicide again.

Thus terror, which is a frequent moral cause of mental derangement, has often proved the cure of suicide. The bath of surprise, which has been said to effect a sudden cure of this propensity, doubtless acts in the same way.

Morgagni relates, that Albert Fabri, an eminent physician of Bologna, having been seized by the hand and held fast by an hydrophobic patient whose pulse he was feeling, soon fell into such despondency from dread of being inoculated by the rabid poison, that he often had an idea of putting an end to his existence. During this intention he fled society for a week. Whilst plunged in this depressed state, he was caught in a violent shower of rain. He returned quite drenched; but his apprehensions of hydrophobia and thoughts of suicide had fled.

In respect to the moral treatment of suicidal insanity, some difference obtains.

To be severed from every object, which, by association, revives a painful idea, common sense dictates, is of the first importance. But as the first access of a propensity to suicide, like the access of mania and melancholia, is accompanied by many symptoms of physical disorder, and is then comparatively responsive to medical aid, the only removal in the first instance to be recommended is, from the place where the patient has been living, especially if it be where his hallucination had birth.

The contemplation of suicide resembles the sole delusion of the monomaniac, which entirely engrosses the mental and moral faculties. It may, however, be broken

into by presenting new objects which powerfully divert the mind. Whenever the morbid thought is for a short space arrested by a fresh object, that is the moment to seize for appropriate reasoning on the fallacy of the delusion, or the wickedness of the design.

But change of scene alone will not suffice. Time soon renders every place familiar; and hence frequent removal is most beneficial. His residence should be always airy and cheerful.

Occupation also should be devised, to which the patient must be led by gentle and almost imperceptible endeavours. What occupation or diversion is preferable, should be regulated by the patient's natural tastes or habits, which must be studied, and by other circumstances. The rich will not descend to manual labour; the tradesman and lower classes have no inclination for works of taste, belles lettres, music, cards, billiards, and similar pursuits. Much, therefore, must depend on the ingenuity of the physician and of those about him.

The study of mathematics and other abstruse sciences, the classics, painting, &c., have been recommended to break the morbid ideas of a suicide. They may each be useful, and should certainly be promoted, if the patient be capable of suspending the hallucination which absorbs generally all his mental faculties.

If circumstances will not permit residence to be varied, the cure will be much more likely to be effected in a well-regulated asylum, than where he will be, with his attendant, the sole occupants of a house or single apartment; for in the former he finds society, while he soon tires of the monotony of the latter. Intermingling with other patients has generally a marked good effect on a suicide. There is so much around him that is novel, so much to divert and arrest his attention, and to break the chain of his own morbid feelings and thoughts, that he the sooner forgets himself and his hallucinations. Here, too,

he finds various occupations, in which it is probable he will soon participate; and if not, he often derives amusement from the aberrations and whimsicalities of his companions.

Wherever he is, his peculiar delusion should never be treated with contempt, or be rudely opposed by the physician or attendants. This would at once destroy the respect and confidence with which lunatics generally treat the medical character, and inspire them with hatred and distrust of the keepers.

It is curious, but true, that what would give mortal offence to lunatics from their physician, they will not regard if it come from a fellow-patient; for a lunatic, though he deny himself to be insane, sees it readily in others, and therefore treats what they say as the emanation of a distempered brain: hence lunatics very rarely quarrel on the subject of their respective delusions. The most common instances of disagreement are when rival deities or monarchs meet, and then disputes will sometimes happen respecting supremacy.

The impulse to suicide sometimes intermits, and then reason to a certain degree resumes its sway. This also is the moment when consolation or reasoning has the best effect. If there be too much susceptibility to be reasoned with directly, observations indirectly made, and as if addressed to another in the patient's hearing, touching his error, will often sink deep in the memory, and loosen its attachments. Being thus talked *at* frequently has a wondrous effect on melancholics, who would be more obstinate if talked *to*.

When once the patient is isolated, the renewal of intercourse with his connexions must be governed by the same rules as in other cases of insanity.

Of course it were superfluous to remark, that every precaution which foresight can suggest should be taken to remove from the person and apartment of one with a

propensity to suicide all means of self-destruction: knives, forks, razors, scissors, pieces of glass, iron or tin, garters, braces, sashes, ribands, laces, bands, even a hatband, handkerchiefs, neckcloths, have all been converted into implements of self-destruction, and all should be taken away.

The windows should be secured, the fire guarded, the lines from the windows and bed-ticking, fire-irons, and every possible implement of self-injury, be removed. No projection on which a cord could be fastened should present itself in the apartment. Even though an attendant sleep in the same room, the clothes of both should be locked up, and the key be secreted. I have known slips to be taken from sheets or blankets, and likewise handkerchiefs and cravats, to form nooses for hanging or strangulation. When no other means offer, they will attempt beating their brains out against a wall.

The means of suicide are often contrived with such wonderful art, secrecy, and patience, and so cunningly combined, that it is frequently quite impossible to detect them, and be guarded against the consequences. A volume might be filled with the stratagems and plans devised to accomplish the object.

The superintendent of St. Luke's Hospital stated, that in thirty years' experience he never knew an instance of an attempt at suicide in the presence of other persons. I fear such evidence may have tended to relax that extreme vigilance which ought never to be asleep when a person has evinced this propensity. My experience furnishes me with many instances where the presence of not one only, but several, has proved no protection. I will particularise two, because they are to the point, and convey some other important hints.

The first case is curious, not only because it shews, contrary to a received opinion, that the presence of other

persons will not prevent the attempt being made, when the propensity is strong and the opportunity favourable, but also because it proves how strong that propensity oftentimes is.

A medical friend, who had much enjoyed life, and never met with any circumstance to occasion him particular disquietude, when at about the age of forty-five became very dyspeptic, low-spirited, and listless. He gradually shunned society; but still, though with great reluctance, pursued his professional avocations. This depression increased so much, that he often told his wife he would consult me. He knew very well that both his father and grandfather had destroyed themselves.

One morning he kept in bed much longer than usual, and a relation calling, went up, without being announced, to see him. He seemed confused, at length complained of being very faint, and upon raising him up, blood was perceived on his hands. Upon examination it was discovered, that at the moment his friend entered his chamber he was employed in opening the femoral artery with a pen-knife! He missed the artery, but there had been a considerable hæmorrhage from the small vessels which he had divided.

I saw him within an hour afterwards. He had recovered from the syncope, and expressed great sorrow for what he had done; described with minuteness his case; lamented he had not seen me sooner, but that he could not muster sufficient resolution; consented to place himself under superintendence; and, in fact, to follow all my directions.

I placed him in charge of a careful keeper. It was agreed he was to be removed into lodgings in the environs of town, and be there submitted to the necessary remedial treatment.

He remained two days at home till lodgings could

be procured, during which he was calm and appeared rational; but there existed the suicidal eye, which sufficiently denoted he was not to be trusted.

On the third morning, his keeper having a violent attack of rheumatism in his right arm, could not shave him, and another person was obliged to be trusted. This person, unfortunately, laid a razor on the dressing-table; and while his face was turned away, and the keeper was heating some water a few feet only from the table, the patient suddenly jumped up, seized the razor, and in an instant, at a stroke, divided one of the carotid arteries!

Major ———, had been wounded at the battle of Waterloo. He had since recovered his health, but a great depression of spirits followed. The maniacal diathesis was hereditary. By degrees he became more desponding, his ideas wandered, and at length a suicidal propensity was evident.

On visiting him I strongly urged the necessity of placing him under the supervision of an experienced keeper; but here, as in too many cases, his family opposed this advice, and would not permit proper restraint, but they put him under the care only of a nurse. In the evening he retired early to bed. The nurse went to tea in his chamber, supposing her charge to be asleep. The patient watched the opportunity, jumped out of bed, grasped a knife on the table, wounded, and would effectually have cut his throat, had not the nurse interposed.

These cases teach us that no dependence should be placed where the disposition to suicide exists.

The result of the last case is also particularly worthy of notice in a physiological point of view. Although the wound inflicted was not deemed of much importance, and he lost only about five or six ounces of blood; yet from that period he evinced a good deal of bodily indisposition and restlessness, his breathing was rather oppressed, the

pulse was languid and quick, and there was great prostration of strength. The following day he died rather suddenly.

Upon dilating the wound in the throat and dissecting downwards, it became apparent that there had been a slight internal hæmorrhage from some divided small vessels, and that the effused blood had found a passage into the bronchia and surrounding integuments. The body exhibited no other morbid appearance. This effusion might account for some difficulty in respiring, but did not, in a person of so much stamen as this gentleman naturally possessed, explain the cause of his sudden decease. I therefore considered death in this instance another proof of what I have so often seen and have alluded to, viz. that when the intelligent principle is impaired, the vital principle is also deteriorated; and death occurs, where, from constitutional disturbance, it is not otherwise to be expected.

I could relate other instances where suicide has been attempted, when, from the presence or proximity of persons, and the means of frustrating it, no one would have suspected it would have been tried. It is important that this should be expressly understood, lest a misguided confidence beget that security in the relations or attendants, which ought never to be placed either in the promises or appearances of any one in whom the propensity is manifested.

Perhaps there is no part of the duty of the physician which requires so much judgment as to decide the exact time when he may place confidence in a convalescent suicide. If, unfortunately, he should refuse his confidence when the patient is convalescent and begins to feel that he has lived in a delusion, the effect may replunge him into his former state; if he shew confidence before the consciousness of ever having been in a delusion arrives, he may facilitate the stroke which has cost him months of care and caution to avert.

He may also suddenly be placed in a situation that requires instant decision.

When could the resources and presence of mind of a physician be put to a severer test than on the occasion which, it is said, occurred to the elder Dr. F. Willis.

The late king desired one day to shave himself. Willis feared, that if he hesitated to give his consent, the king would see that he was suspected of an intention to commit suicide, and thus the idea of such an act would be engendered where it might not as yet exist. He promptly sent for the razors. But before they could be brought, he engaged his majesty's attention with papers which were upon the table. The king continued so occupied with them, that his physician felt assured he entertained no design of the kind. After having shaved himself, he resumed his papers. The razors were not sent away immediately, lest the thought should come across the king that he could not be trusted. Such self-possession and tact would have been admirable in an ordinary case ; but when we consider the rank of the patient, and the immense responsibility attached, we must own that Willis was endowed with exemplary qualifications for the trust imposed upon him.

I think, however, it may be admitted as a general rule, that symptoms denoting improvement of health or mind may be discovered by an attentive observer, which will guide his judgment how far he may enlarge the liberty of a suicide, and how far he may confide in him.

One of the most distressing and troublesome modes of shortening life is, when a patient determines to starve himself. Management and art will here do much, but sometimes force only can overcome this resolve.

It sometimes becomes a question how long this resolution may be sustained without danger to life from inanition. Of course this must be regulated in a great degree by the natural powers of the constitution, the time

of life, and the state of health when such resolution began to be acted upon. Happily, this resolution is oftener made than persevered in. It generally succumbs upon a few days' fasting, or perhaps the scent of savoury viands.

I attended a nobleman, aged thirty, who from fear of poison, though he pretended it was in imitation of our Saviour's fast, took nothing but strawberries and water for three weeks, and these in very moderate quantities. He never voluntarily abandoned his resolution to fast, but was at length compelled to take nutriment. Inanition, however, had gone too far. He was reduced to such a cachectic condition that all care was fruitless, and he died completely extenuated. Previously to his death the inguinal, axillary, and submaxillary glands, and every bruise or abrasion of the skin, were in a state of sphacelus.

There is an extraordinary instance of a suicidal design recorded, and which is worth noting, were it only to shew the extent to which the human powers can sustain life unaided by proper nourishment, even though the intelligent principle be subverted.

An officer, having experienced many mortifications, fell into a state of deep melancholy. He resolved to die of famine, and he followed up his resolution so faithfully, that he passed forty-five days without eating any thing, except on the fifth day he asked for some distilled water, in which was mixed a quarter of a pint of spirits of aniseed. This lasted him three days. Upon being told this quantity of spirit was too much, he then took in each glass of water no more than three drops of it, and the same quantity of fluid lasted him thirty-nine days. He then ceased drinking; and took nothing at all during the last six days. On the thirty-sixth day he was obliged to recline on a couch. Every request to induce him to break his resolution was useless, and he was regarded as already lost, when chance recalled him to a wish to live. Having seen a child enter with a slice of

bread and butter, the sight excited in him so violent an appetite, that he instantly asked for some soup. They gave him every two hours some spoonsful of rice bouillie, and by degrees more nourishing diet, and his health, though slowly, was re-established.*

Lunatics who act under any other delusion except the desire of voluntary death, are often either persuaded by kind entreaties, or induced by stratagem, to eat. When they will not be persuaded, the best way is to place tempting food within their reach, and leave it. Should it be evident that the patient has partaken of it, no notice should be taken of that fact, but the same course should be daily pursued, and always as if the leaving of the food were mere accident, for the calls of hunger will sometimes surmount even a suicide's resolution. This plan should be tried with every lunatic who refuses food. Frequently they delight in stealing food, and will take it in no other way. If so, it is requisite to indulge this caprice.

Falret says, that noisy or even moderate gaiety irritates melancholics: the contrast of this gaiety with their own situation damps their spirits. The gayest spectacles, even when they do not produce depressing effects, afford only a very transient pleasure. The truth of this remark I have oftentimes seen confirmed, when I have endeavoured in similar ways to divert the gloom of a melancholic or suicidal patient. The theatrical spectacles got up at Charenton with this view, some years ago, produced a very opposite effect to what was expected. In truth, I believe, that amusements or diversions for the insane, like religious consolation and instruction, must be selected to suit the various conditions of deranged intellect, or more harm than good may follow.

* Hist. de l'Acad. Roy. 1769.

This author further remarks, that he has frequently accompanied melancholics to the theatre and afterwards to the hospitals, wishing to compare the effect produced on them by these opposite exhibitions. He found that the visits to the really afflicted were most useful; for they suggested the idea that themselves were not the most miserable of beings. I must here, however, remark, that the description or sight of the sufferings of others has sometimes a depressing effect on the melancholic suicide, and therefore the experiment of taking them to visit hospitals is not to be tried on all with impunity.

Commonly, those with a propensity to suicide are melancholics, and quiet in their deportment. Such do not perhaps require any personal restraint during the day, and while they are watched; but during the night, although an attendant or other patient sleep in the same room, they ought not to be allowed the free use of their hands. A young lady, very quiet in conduct, and who would amuse herself with needle-work all day, found means to secrete a pair of scissors, and while in bed with her nurse, pierced her heart with them without disturbing her companion.

Sometimes all the fury of mania accompanies the desire of self-destruction; and to accomplish it they will dash their heads against the wall, pitch head foremost from a window, or down stairs, and commit a thousand violences. These must be straitly constrained. In 1821, I saw a lunatic in the Quaker's Retreat, at York, the worst and most determined on suicide I ever heard described. Besides attempting all other means of destroying himself, he would tear his flesh with his teeth, and desperately resist all who wished to restrain him. The confinement imposed on him was proportionably, but properly, severe. On a second visit, the following year, I inquired the fate

of this miserable being, and learnt that he had died of apoplexy.

What further may be advisable for the moral or medical treatment of suicide being equally applicable to insanity generally, I must refer for information to the fifth part of these Commentaries.

COMMENTARY IX.

HYPOCHONDRIASIS.

THIS affection clearly ranks among the *vesaniæ*. It is characterised by lesion of the judgment respecting personal feelings, with mental depression, without fever or coma. Hence I consider it cannot be omitted when treating on disorders of the intellectual faculties.

The anatomical compound *hypochondria* denotes the site of the disease; but the synonyms, which are numerous, singularly indicate the incertitude which has at all times prevailed both as to the seat and cause of this malady.

Sydenham and others have considered it and hysteria as identical. Some conceive that hysteria in females is hypochondriasis in males. I think, however, that an attentive consideration of their respective phenomena will prove that they are distinct diseases. Without entering into a closer examination, one fact perhaps will decide this question. Hysteria is an affection almost confining its range of attack from puberty to thirty years of age, and is a local affection. Hypochondriasis never shews itself before the age of twenty-five, is more common in middle life, extends to the age of sixty, and rarely beyond it. Hoffman mentions a case at the age of ten; but it is, if correct, a solitary instance. This affection may be complicated with, alternate, and terminate also in insanity: thus proving that they are of the same family, though distinct in their primary stages.

Hypochondriasis presents many varieties and shades,

of which nostalgia perhaps is one. It were superfluous here to enumerate other modifications of it. All the old, and, with few exceptions, modern authors, have coincided in assigning the seat of hypochondriasis to the abdominal viscera, and this still biases public opinion. Each viscus has had its advocate; but most think that the stomach is the ordinary site and focus.

Villermay, one of the most recent and elaborate writers on hypochondriasis, cites many examples, and ascribes the primitive seat of it to the abdominal viscera, and especially to the stomach;* and that these are affected in their sentient or vital properties. Stahl, however, has particularly noticed the disorder of the circulation among the symptoms of this disease, and ascribes to it much influence. And Villermay himself, in his arrangement of the various causes of hypochondriasis, assigns numerous irregularities in the sanguineous system, and even a state of plethora, general or local, as active or passive agents in its production.

Dr. Parry† alleges that hypochondriasis, although one effect of that morbid sensibility which characterises the nervous temperament, yet is occasioned by excessive determination of blood to the brain; and in proof of it, refers to the symptoms,—flushing of the face, and heat about the head and forehead, with preternatural impulse of blood through the carotid arteries, and a feeling of weight, fulness, or constriction; which sensations are often followed and greatly relieved by a flow of tears; and not only these symptoms, he says, but the accompanying mental distress is thereby removed. The head, indeed, in this case, is often the centre of defluxions. Violent grief produces the same train of feelings, and sometimes in an equal degree; and will originate sudden madness,

* *Traité des Maladies Nerveuses*, &c. tom. ii. chap. x.

† *Elements*, &c. pp. 325, 326.

unless the surcharged vessels of the head find vent by a copious discharge of tears, or are relieved by timely evacuation of blood.

Georget and Falret both adopt nearly the same view. The latter, in his observations on hypochondriasis, presents a very sensible critique on Villermay's opinions and deductions, and very successfully points out proofs, that it most frequently originates in a disordered state of the circulation, and that the seat of it is in the encephalon.*

Before Parry's work was published, in 1815, I confess I was influenced by the prevalent opinion in the visceral origin of this disease, and treated it according to the existing pathological views of it: but I remember scarcely a case so treated that recovered. Disheartened by the continuance of the disease, the patient generally sought other advice, or it degenerated into melancholia; and in two or three instances I heard that life had been ended by suicide.

Longer and more extensive experience has satisfied me that Parry's views of the pathology of hypochondriasis are generally correct, though I am not prepared to concede that the primary cause is always in a disorder of the circulation. On the contrary, I am convinced this disease is frequently sympathetic, from a morbid condition or action of the organs engaged in the offices of digestion, assimilation, and excretion. The stomach, liver, pancreas, and intestines, may often be primarily in fault, and soon implicate the heart and vascular system: the brain then is consecutively affected.

Palpitation of the heart is one of the first symptoms of this affection. Now the movements of this important organ are well known to be sympathetically increased in force and velocity by a disorder of the digestive functions.

* *De l'Hypochondrie, &c.* 1822.

A morbid impulse being once given to the central and moving organ of the circulation, disorder is likely to be superinduced in the more distant parts of the apparatus.

The pathology of hypochondriasis, therefore, is susceptible of the same explanation as insanity generally; except that in the former the abdominal viscera are perhaps more uniformly morbidly affected, while pure mania may originate and exist, and all those viscera be perfectly healthy both in structure and function.

There are very few dissections of hypochondriacs, because few die of this disease; but those which have been so examined, exhibit proofs of increased vascular action in the brain.

Anatomists have also examined the texture of the nerves in this disease, to discover its cause; but, as may be imagined, with as little success as has attended all attempts by dissection to elucidate the pathology of any malady classed among the *neuroses*.

The analogy of the moral causes of hypochondriasis to those of melancholia is as striking as the physical: they are in reality the same. But the former is more peculiarly the malady of genius, of minds the finest and best cultivated, and of literary and sedentary men.

Hypochondriasis I have known induced in a healthy but nervous person simply by reading medical books.

The unhappy vapourer, J. J. Rousseau, is a striking illustration of this fact. Having commenced a course of medical reading to cure his own complaints, he became most wretched, fancying himself afflicted with every one of which he read; and at length imagined that the basis of his disease was a polypus of the heart! But this contagion is not confined to philosophers and the unlearned in medical science; even physicians, as well as medical students in attending their first courses of instruction, have self-appropriated diseases, of which they have been merely reading, or have lately seen. There is no wonder

if such susceptible beings should induce in themselves morbid affections, and especially hypochondriasis.

Inquietude as to the event of a real ailment, or chagrin at being ill, may be actual causes of hypochondriasis. The delirium of the hypochondriac is always that of self-love. His anxieties, fears, and delusions, being always personal, he flies with eagerness to every remedy suggested for his relief and the preservation of life. The melancholic, on the contrary, cares little about himself, and usually is very repugnant to, or obstinately refuses, all aid. Except as it regards his own imaginary grievances, the judgment of the former is correct. He can converse rationally and freely when diverted from himself, or write or compose with his former ability; and is even capable of intellectual exercises foreign to his taste, if he have resolution to set about them.

Cowper was naturally highly sensitive and melancholic, and his mental aberrations at times exceeded hypochondriasis. He acknowledged that when he trifled, it was by necessity; for that a melancholy, which nothing else so effectually dispersed, engaged him sometimes in the arduous task of being cheerful by force. Strange as it may appear, his most ludicrous verses were written in his saddest mood, and but for that sad mood had never been written at all: the famous ballad of John Gilpin owed its birth to an effort to beguile the unhappiness of the amiable poet.

Molière, in his *Malade Imaginaire*, gives an appropriate and faithful portrait of the hypochondriac.

The external senses of the hypochondriac are rarely blunted, nor are his affections usually perverted; there is no delirium, and he therefore accurately describes his feelings as they are impressed on his mind, though many of them are delusive.

But the judgment is always in error, and hence all his views of himself and of real life; but the patient being most

anxious about self, he expresses, therefore, the most unreasonable anxiety respecting the merest trifles connected with his own health or affairs. He is perpetually feeling his pulse or looking in the glass, and prognosticating his speedy death; and he conjures up some imaginary complaint from which he apprehends danger. His spirits are dreadfully depressed.

Besides the other marks of vascular impulse towards the brain, to which I have referred, the temporal arteries are seen much distended, and the carotids beat strongly; there is often considerable pain in the eyes, which is sometimes constant, sometimes periodical or occasional; oftentimes one eye only is affected. During the paroxysm, the globes of the eyes will protrude from their sockets and appear larger, or perhaps be retracted within their orbits. The palpitations of the heart often cease when the symptoms of determination appear. The complexion varies: at first the face is often flushed or pale; as the disease advances, it becomes yellow or of a dusky hue. There are alternate great heats or chills felt; and he is extremely susceptible of atmospheric changes. The pulse is variable; generally it is languid; but when the paroxysm denoting the disturbance in the circulation comes on, it partakes of the commotion, and is quicker and fuller. This commotion often takes place when the patient wishes to go to sleep, and then prevents him. Harassing dreams often attend. Faintness, or a degree of weakness, with slight vertigo, intervenes, but shortly goes off. There is generally pain at the epigastrium, with a sense of stricture across the hypochondria, and dyspepsia.

The digestion being defective, after meals the stomach is much distended and oppressed with flatulence. A good deal of saliva is occasionally secreted, and sometimes a very offensive acid mucus; and frequent thirst is felt. The stools are very dark coloured, and matters are often vomited varying in quantity and colour, now

and then blackish. It is the colour of the evacuations, probably, which has contributed to the supposition that hypochondriasis proceeded from atrabile. The urine is copious and pale; when indigestion is great, it is often whitish like whey. Costiveness and diarrhœa sometimes alternate, but the quantity evacuated is usually insufficient.

The patient generally is more free from complaints in the morning than the evening and night. Bursts of tears, without any particular cause, are common, and this usually produces temporary relief. When the power of shedding tears is withheld, the distress of the head is aggravated, and there is redness of the eyes, stuffing of the nose, and the turgescence of the temporal arteries is more conspicuous. A sense of fatigue is urged, but he is at the same time capable of considerable exertion, though generally indisposed to move.

The general character of the physical symptoms, and the expression of the countenance, do not much differ from melancholia, except that there is more of morbid sensibility and timidity; the great difference is in the moral features of the two affections.

It must not, however, be supposed, that the corporeal sufferings of the hypochondriac are all imaginary. Many of the distressing symptoms he describes are real, especially in reference to the head and stomach. He sometimes feels pain in the head, general or partial; now and then it is confined to the vertex, and often as if the head were compressed in a vice. The pericranium acquires an extreme sensibility, especially where the partial pains in the head are felt, and great pain is expressed if the hair only of that part be touched.

Most of the numerous and extraordinary sensations referred to are doubtless delusive, such as a kind of clicking noise or report in the head, chest, or belly, and erratic pains and creeping motions, like the trickling of

water or crawling of insects under the skin. Others, however, are real, such as tremors, dyspepsia, palpitations of the heart, and flatulence so distressing, that some authors entitle the disease *flatuosus*, *ructuosus*, &c. The eructations and borborygmi are often very troublesome and loud. Besides these belchings and rumbling noises in the bowels, the abdominal muscles are affected by convulsive twitchings. These symptoms are often causes of great apprehension to the patient.

If the disease proceed, all the symptoms are aggravated, and great languor prevails; the skin is more sallow or darker, and becomes pimply; and the mind, which at first is slightly affected, is very confused. Indifference to their connexions follows. They are more timid and gloomy, irascible and changeable. Their ideas now flow very slowly, attention is fleeting, the memory fails, and at length true melancholia is developed; and *tædium vitæ* succeeds the fear of death which precedes it, and the scene closes by suicide. The exacerbations are very irregular, and so is their duration: when they assume an intermitting type, this affection has been called *vapours*.

Very cold drink or ice swallowed when excessively heated, medicines inconsiderately taken or too long persevered in, abuse of stimulants, intense study, and desponding views on religious subjects, are all sources of hypochondriasis.

This affection has often its solution in certain spontaneous discharges: hæmorrhages, natural or accidental, as the menses, epistaxis, or hæmorrhoids; partial sweats of the hands, arm-pits, and especially of the feet. The occurrence also of cutaneous diseases, and particularly the return of suppressed or periodical eruptions, have determined it. Sometimes, however, the terminations are of a character active and fatal; such as acute, but more often chronic, inflammation of the abdominal organs, changes in their structure, pulmonary consumption, and

aneurisms of the heart; all of which, by the by, are further evidences of vascular action.

Esquirol describes, as before noticed, a displacement of the transverse colon in his dissections of melancholics, which might well account for those extraordinary and painful sensations in the abdomen, to which hypochondriacs refer.

Neither does any reasoning militate against the existence of congestions in the abdominal viscera, which may act as remote causes of the cerebral affection. Assuming this congestive state to prevail, the good effects of hæmorrhoidal discharges of blood, or of the application of leeches to the anus, can be fully understood and appreciated.

Indeed, one is led to conceive, from the frequent mention of the piles by old and by almost all the continental modern authors, that they were uniform concomitants with the hypochondriacal diathesis. How highly beneficial the bleeding from them was esteemed in this disease, we learn from Alberti, who designates such discharges *medicina hypochondriacorum*.*

In this respect, the cases I have met with differ from those described; for certainly hæmorrhoids have more rarely accompanied the disease.

Treatment of Hypochondriasis.

In the cure of hypochondriasis, as I have already observed, it is imperative to restore natural or artificial discharges, or institute vicarious discharges for those which have been obstructed or suspended; and it is equally so to procure the re-appearance of receded or habitual cutaneous eruptions.

Topical bleeding from the head is in all cases required where determination is evident. Purging violently

* Dissert. de Hæmorrh. Halle, 1716.

is generally injurious, though the excretions are always dark and offensive. As costiveness, however, is a general accompaniment, this must be obviated, and is best effected by aloetic and warm aperients. Small doses of the blue-pill combined with aloes, and light tonics, seem best adapted to restore the digestive functions. The warm bath, or a tepid shower-bath and friction, are very serviceable in equalising the circulation, and restoring the functions of the skin.

Emetics are borne better than purges, and they commonly evacuate much saburra from the stomach, with evident relief. Exercise, occupation, and amusements, as far as they can be borne without irritation, are powerful adjuvants in restoring health.

In the following case, the production of an imitative cutaneous eruption, where one had appeared periodically for some years, proved a cure.

An accountant, about forty-five years of age, and of exceedingly regular habits, but who, from the nature of his occupation, led a very sedentary life, was suffering the greatest depression of spirits, and most of the symptoms of genuine hypochondriasis. Upon inquiry, I learnt that every autumn he had been troubled with a pustular eruption on his neck, back, and arms, which he had missed the preceding autumn; and soon after, the usual symptoms of this disease gradually developed themselves.

By the daily application of blisters, the size of a shilling, along the course of the spine, which kept up a constant irritation and discharge from the cutis; removing him from his occupations in the city to a purer air and more cheerful scenes; and regular exercise and attention to the chylopoietic functions, he soon amended, and in about six weeks quite recovered.

A gentleman of fortune, aged fifty, of the melancholic temperament and hereditary predisposition, became very

desponding, and in consequence unmanageable. He was married, and had a numerous family.

His father was an eccentric and violent man, but had displayed all the talents of a great statesman, and was just dead, at a very advanced age.

My patient was naturally of an amiable disposition, of a highly cultivated mind, and deeply learned in various languages; he accordingly had the habits of literary men; nevertheless, in the season, he was fond of field sports.

He had lately experienced a great deal of mental anxiety and vexation, by which his spirits were much depressed, and a gradual change had been consequently observed in his disposition and habits; his health, too, was visibly affected.

In the commencement of these distressing symptoms, a sister died who had been insane many years. This very seriously affected him, and impressed him with an opinion that his own mind was becoming deranged.

He complained of great pain and throbbing in the head, beating of the temporal arteries, flushings of the face, and general confusion of ideas, with sleepless nights, and, if he had a short slumber, terrific dreams. His digestive powers were exceedingly impaired, and he was troubled with great flatulence, borborygmi, &c.

He was bled and took some medicines, and went to a friend's house in the country. Here one night he became rather violent, and evinced a positive delusion of mind. He was brought back to town, and I was then called in.

His countenance betrayed great gloom, anxiety, and suspicion; the complexion was very sallow; tongue whitish, with a brown streak down the centre; pulse quick, small, and hurried; bowels very constipated, nights sleepless, appetite moderate, skin cool. Every evening the throbbing

in his head and flushing of the face returned, and he was then very irascible and almost unmanageable. He often shed tears, and always with relief, and was repeatedly sighing. He was dreadfully apprehensive he should die, and stated many diseases to which he thought himself disposed, and he was willing to submit to any remedies I recommended. His general timidity, indeed, was extreme.

For his wife he expressed the warmest affection, and his fears of being separated from her. Of his children he spoke kindly, but had no wish to see them. Of his affairs, generally, he had a clear comprehension; but from mere despondency, fancied he was in danger of arrest for debt.

Without opposing any of the impressions of his own case, I endeavoured to inspire him with the hope of soon getting well. I told him confidently that he was not insane, as he had suspected; but that as he had experienced a paroxysm of delirious violence from temporary fever, and as this might occur again, and lead to serious consequences, I should place him under the direction of a respectable keeper, who would sleep in his chamber, and attend upon him when he walked out; and I advised him to remove, *with* his wife, from his own house into another, where he would not be interrupted by any except those who were proper to visit him.

Happily, his lady was a most accomplished woman, and possessed every qualification and disposition to aid my directions. She, besides, still retained the best influence over her husband — his unbounded affection and confidence. Such a coadjutrix was not to be separated from my patient. None of his old servants, however, were permitted to accompany him.

The pain, throbbing, and confusion, he thought much relieved by the application of eight leeches behind his ears. An emetic brought off an immense quantity of

tough viscid phlegm from his stomach, and a subsequent purge evacuated an abundance of black and very offensive fæces. He used the pediluvium every night. Afterwards he slept better than for many previous weeks.

He took the blue-pill combined with aloes every night, and a saline bitter draught twice a day; and adopted a course of regular exercise, light diet, and early hours. At home he amused himself with any light reading, and such games as he could be persuaded to engage in.

Three days afterwards the leeches were again applied, and with the same relief. I may here observe, that their application was afterwards renewed, with intervals of a few days, till all the symptoms of cerebral determination ceased. The result was beneficial, but not immediately; for the day after he always complained of weakness, and on the second day invariably felt better.

As he bore the emetic well, it was repeated twice or thrice, each time ejecting much viscid phlegm. The pulse returned to its natural standard, but was languid; the tongue cleaner.

Light tonics only were now exhibited. He still every day had paroxysms of despondency, accompanied by tears; but they were diminished in force, and his sleep was more refreshing. There was some difficulty to make him exert himself and take sufficient exercise, as he would fancy himself exceedingly weak; and an indisposition to reading, or any amusement.

By degrees he became a little more animated. One day I surprised him by a challenge to a game of chess, of which when well he was very fond. After some hesitation he consented. He commenced, as I was told, his usual play. He made a false move, was greatly nettled, and going to give up in despair. I purposely, however, avoided taking all the advantage I might. This encouraged him, and he proceeded; but he had not patience to finish the game. Nevertheless, this effort had

a good effect, for it roused him ; and after I went away, he proposed going out, and walked some miles, ate a good dinner, read the newspaper to his wife for the first time, and continued till bed-time cheerful.

From this date he daily gained a little confidence, asked to see one or two particular friends, took exercise regularly, and engaged in some simple amusement every evening. His corporeal functions improved, and also his general appearance. Still, occasionally, he was a little fretful and desponding ; and upon any unusual noise, was suspicious of more being meant than met the eye.

The leeches were continued twice, and then once, a week, for two months ; and the tepid shower-bath, and more powerful tonics, were prescribed.

He then went to the sea-side, and his keeper was removed.

At my request he gave up, or at least relaxed, his studious habits, and devoted himself more to riding on horseback and his field sports.

His spirits were variable till the spring, when he quite recovered. Although he has since lost his amiable lady, and met with many other trying domestic circumstances, yet his hypochondriacal affection has never returned.

I have given this case somewhat in detail, because it contains an epitome of the practice I have found very successful in the treating of hypochondriasis, if not of very long standing.

Cases that have been running on a long while, like all other chronic cases of disease, are more difficult to manage, and the event is more uncertain.

A Scotch divine, of eminent learning and piety, and of most amiable manners, in whose case I felt a deep interest, came under my care. He was aged about sixty. The first time he experienced hypochondriasis was when a young man, and it was then induced by severe study.

It had recurred again about two years before I saw him, and had been existing some months. He thought himself rather improved by his journey from Edinburgh.

The characters of the case were clearly marked. In about three weeks he was amazingly better; but I had not the same chances of success as in the former case, for my patient was allowed to do as he pleased.

All remedies were shortly abandoned in despair; and there was no one of sufficient authority about him to enforce them. After a consultation with Sir Henry Hallford, he resumed the remedies for a little while, and improved; but he grew impatient, and abruptly left London to try other advice and other places. As might be expected, he continued ill a long while, and has never completely recovered.

I state this case not as an uncommon one, but to shew how different is the result when the patient is not under proper control.

The moral treatment of hypochondriasis requires much delicacy; and as the mental phenomena of the disease differ from those of other forms of intellectual derangement, so this important part of the curative plan likewise varies.

Uninterrupted confidence of the patient in his physician is the sure basis of success in the treatment of all mental affections. The maniac is too furious and irritable to describe any complaints; the melancholic is generally disinclined so to do; but the hypochondriac's chief solace is in a detail of all his feelings and pains, real and imaginary. Hence the physician must listen with great attention and apparent interest to the long enumeration of symptoms, and sympathise with all his patient's sufferings. But he must be strictly on his guard not to commit himself by fixing any limit to the disease, lest the prognostic fail; neither must he accord

with the patient's own gloomy predictions, lest he, who is always inclined to put the most unfavourable construction on what is said, should be driven to absolute despair. It rarely does mischief to let the insane know you are fully apprised of the nature of their malady. But beware of giving an hypochondriac reason to think his mind is deranged: it is the surest way to make it so. Neither ridicule his predilection for adopting all sorts of remedies; for it will forfeit his confidence in you, and either make him relinquish all means of cure, or drive him to resort to empirics.

It is often prudent, and sometimes has removed an imaginary disease, to treat it medically as if it were real. But as the hypochondriac is always acute, and watches with jealous attention the conduct of his physician, and from his general knowledge is not easily deceived in the nature of most remedies, great care must be taken that he do not detect the intention. Moreover, he ought never to be suffered to read what is prescribed for him.

After gaining his confidence, and becoming acquainted with his weaknesses, a sensible physician will know how to meet and combat them. He will sometimes reason, sometimes console, sometimes exercise a little firmness, especially in enforcing his prescriptions; and at other times, to obtain the patient's consent, alarm him a little with the consequences of non-compliance. But he should be careful always to speak and act with caution, quietness, and self-possession.

The affections of the hypochondriac are more rarely perverted than the melancholic; his morbid associations are fewer and more changeable, and his attention for a shorter or longer time may be easier arrested. A little society with agreeable persons, and those he loves, is not only admissible but desirable. The consolations of friendship are balm to his afflicted spirits.

When his real ailments no longer require medical

superintendence, he should take short journeys amidst pleasing and varied scenery. All kinds of exercises are to be recommended, since they promote the circulation and re-action, and improve all the secretions. Of all exercises, riding on horseback, and driving a carriage, are preferable. By the first, every organ is put in motion, and a necessity is imposed on him to exert some attention in guiding the horse; by the second, still more attention is attracted, inasmuch as directing a carriage is more difficult than directing a horse; and the advantages of change of scenery and air are obtained. Besides, the patient thus imperceptibly acquires the habit of using and feeling his own powers.

I have tried the effect of music in assuaging the gloomy and distressing feelings of the miserable hypochondriac; but those who were before most alive to harmony seem most agitated and distressed by a "concord of sweet sounds;" and those who had no taste for music are perfectly insensible to it.

Tissot, who imparts much information relative to this disease and its varieties, entertains a very unfavourable prognostic of its termination; but, in my judgment, his mode of treatment was not calculated to insure frequent success.

The prognostic must, of course, be guided by the nature of the causes, the age and temperament of the patient, and the intensity and complexity of the symptoms.

If the disease arise from no particular cause, we may judge favourably of the issue; if from some powerful and afflicting moral event, it aggravates the case, because memory perpetually recalls it, and opposes the effect of remedial aid; if from excessive indulgence either in drinking, *nimia Venus*, or a solitary vice, the hope of recovery is slender indeed.

The person and countenance are in this latter case very

striking, and not unerring indices of the event. If much emaciation has taken place, and a very decided change from the natural colour of the skin—if the features are contracted, and their expression be a fixed melancholy, the probability is great, that one principal, or several organs, are implicated in the cerebral affection, and the prognostic is consequently unpropitious.

Hence it may be judged that no prediction in this malady ought hastily to be hazarded.

It may continue months or years, and then end happily. But it sometimes terminates in melancholia or mania, especially if there exist an hereditary predisposition in the patient; then desire of self-preservation, which at first characterises this affection, is often converted into the desire of self-destruction.

COMMENTARY X.

DEMECY OR FATUITY.

THE condition of the mental faculties designated *moria* or *morosis* by the Greeks, and *amentia* and *dementia* by later authorities, is recognised by nosologists as a distinct genus; but, like mania or melancholia, it is only a variety: it is liable to the same alternations, and is met with both in an active and chronic form.

It is defined to be a defect or hebetude of the understanding, general or partial, confined to individual faculties of the mind, particularly those concerned in associating and comparing ideas; whence proceeds great confusion and incapacity of arranging the thoughts, though they are sometimes very vivid, a partial or total loss of memory, a relish for childish pursuits, with garrulous babble or drawling speech, impotency, and diminution or loss of the powers of volition, and premature senility.

The countenance and eye are dull and stupid, the gait feeble or lounging, appetites depraved, unconsciousness of the calls of nature, abdomen frequently tumid, and little disturbance of general health.

The faculties in demency are not, however, always abolished; they are often in abeyance only, and may revert on the cessation of the morbid action inducing this condition, or on the improvement of the corporeal powers, when they have been impaired by disease or any extenuating cause.

Esquirol draws a faithful picture of demency.* Per-

* Dict. des Scien. Médic. art. *Démence*.

sons are in this state, he says, because exterior objects make too weak an impression upon them, which is owing either to the sensitive organs becoming weakened, or the organs which transmit the sensations having lost their energy ; or, finally, because the brain itself has not sufficient power to receive and retain the impression which is transmitted to it ; whence it necessarily results that the sensations are feeble, obscure, and incomplete. Therefore the patient can neither form a correct idea of objects, nor compare, associate, or abstract ideas ; he is not susceptible of sufficient attention, the organ of thought being deprived of that tone which is necessary to the integrity of its functions.

There is a marked difference between demency and imbecility or idiocy. The connate imbecile never had his mental faculties fully developed, and therefore never attains the ordinary standard of adult intelligence. True demency implies a previous possession and exercise of the mental faculties ; but one or more of those faculties may, by accident, disease, or age, have become simply deteriorated. The conversation and manners of the latter preserve some traits of the character of the original man ; those of the former always retain the impress of childhood. The connate idiot never possessed any intellectual endowment ; there is neither sensation, memory, nor judgment. He displays mere animal instincts, and his internal and external conformation indicate the vices of cerebral organisation.

The depravity of the mental faculties which characterises demency is very apt to be confounded with permanent mental alienation, imbecility, or absolute idiocy ; in consequence of which many cases have been pronounced irremediable, which might, by judicious treatment, have been restored to reason.

Demency may alternate with mania or melancholia, or it may, which is more usual, be the sequel of either.

It may continue several weeks or months, and suddenly cease ; and instances have been known of its preserving its pristine form for years, and at length the understanding be restored ; or it may degenerate into chronic fatuity or perfect idiocy.

When this condition of the mental faculties succeeds mechanical injuries of the head, violent evacuations, venery, masturbation, paralysis, epilepsy, or old age, it assumes the chronic form, and is generally a permanent affection.

Demency is often a mere concomitant of other forms of insanity ; and then is usually quite temporary. This fact is particularly worthy of remark, because the appearance of fatuity frequently leads to the hasty prognostic, that a patient is sinking into an irremediable chronic state, or that it is the result of excessive depletory practice. It is advisable, when such symptoms appear, to wait ; for a few days, perhaps, prove, by the remission of the symptoms, the fallacy of either of these conclusions.

This mental condition may be the effect of general debility, or of long-continued maniacal action itself, producing atony of the organ of intelligence (the brain) ; and this is the common termination of all cases of insanity when really incurable, provided that the patient live long enough for this organic change to take place.

When it succeeds insanity, it may come on suddenly or slowly : patients sometimes appear to be improving, or convalescence even to be advanced, and suddenly, or in a very short time, lose their intellectual powers. This state is often preceded by an attack of acute paralysis, and generally the muscular powers are partially impaired. All who, after a marked amendment, or an equivocal cure, fall into this state of mental alienation, even without paralysis, remain incurable : no excitant can then renew the energy of the brain.

When demency comes on slowly, it is almost impossible to fix the exact date of its origin ; but the signs which characterise it soon leave no doubt of its existence : if the patient becomes suddenly furious or agitated, fatuity disappears, and afterwards he will cease his noisy babble, be tranquil, and sleep profoundly.

When reduced to this hopeless state, ideas the most opposite and extravagant succeed, without connexion or motive, and his conversation then becomes quite incoherent. He utters words or sentiments without attaching any precise meaning to them ; and talks without the consciousness of what he says. Memory is often sufficiently retentive to remember some stories of past-gone days ; but they are repeated, as it were, from an involuntary or automatic impulse, or recollection is revived by fortuitous accordance with objects which actually strike his obtuse senses.

Before insanity thus degenerates, the delirium either remains the same a long while, or varies in character or intensity. In this state it is often very difficult to decide if there still exist a hope of cure, or if the disease be incurable. Should it continue above two years, the ordinary limitation, it is very rarely cured.

This state too of the intellectual faculties is often the consequence of paralysis or epilepsy. It is then a hopeless case.

As authors have commonly neglected to treat this as a distinct and active form of mental derangement, I shall refer to, and quote more particularly, the information conveyed by Esquirol and Georget relative to it. I feel besides a conviction of the general fidelity of their descriptions. Perhaps, as is usual with the French, there is too much refinement and fondness for system in their division into species, &c. But it is desirable to incite, if possible, by their example, a more minute attention to a condition of the mind frequently met with in all public

institutions for lunatics, and which, I verily believe, is neglected because it is not well understood.

Esquirol divides demency into two species, *simple* and *complicated*, and each species into four varieties. The proportions of poor women so affected in La Salpêtrière, and of those in his private establishment, who are persons in good circumstances, and of both sexes, he has thus arranged: —

TABLE OF THE SPECIES OF DEMENCY.

<i>Simple Species.</i>		In La Salpêtrière.	In Esquirol's Establish.
1. Acute demency	.....	10	11
2. Chronic demency	....	43	32
3. Senile demency	.....	35	2
4. Intermittent demency	.	7	2
<i>Complicated Species.</i>			
1. Melancholic demency	.	34	20
2. Maniacal demency	..	21	8
3. Convulsive demency	.	4	6
4. Epileptic demency	..	30 in 289 epileptics.	

TABLE OF AGES WHEN DEMENCY OCCURRED.

<i>Age.</i>			
15	.....	2	1
20	.....	4	5
25	.....	9	14
30	.....	14	9
35	.....	9	8
40	.....	13	9
45	.....	16	12
50	.....	20	15
55	.....	16	4
60	.....	16	1
65	.....	10	1
70	.....	11	1
80	.....	13	1
87	.....	1	0
		154	81
Total 235.			

In relation to the causes, they may be thus arranged:—

1. *Acute demency*—proceeds from transient excesses in diet, fever, hæmorrhages, and too great evacuations of any kind, metastasis, suppression of an habitual discharge, or debilitating treatment of insanity.

2. *Chronic demency*—proceeds from the other forms of insanity, epilepsy, apoplexy, paralysis, intense study, drunkenness, masturbation, and abuse of sensual gratifications.

3. *Senile demency*—may proceed solely from the progress of age, or may be the consequence of long-standing insanity to that period of life when the intellects have a natural tendency to decay. This class of patients are designated by the French *insensés*.

4. *Intermittent demency*—alternates with mania or melancholia, and has been observed to come on in these cases about spring or autumn; but after several returns, is apt to end in permanent demency.

Complicated demency—is connected with any of the first three preceding conditions. It is likewise complicated with melancholia, mania, epilepsy, convulsions, especially with paralysis, and also with a state of cachexy.

Disorders of the uterine system constitute one fourth of the number in the register, the progress of age more than a fifth, and mania and melancholia conjointly a seventh.

This enumeration, however, of the causes of acute demency is deficient, for it ought, correctly, to include all which induce insanity, whether moral or physical.

Deterioration of the intellectual faculties sometimes arises from a constitutional and inexplicable cause. I have seen instances of youth, in whom more than ordinary abilities have been displayed, and who, up to the period of puberty, have made all due progress in their studies; yet when they have arrived at that epoch at which all the mental faculties are usually developed, have gradually retrograded, till a perfect state of chronic demency, or rather idiocy, has been established.

Master ———, a stout and remarkably fine boy till he was twelve years old, had evinced all the capacity and activity usual at his years. At this period some change was perceived in his disposition and habits. He became negligent and irascible; fonder of amusements below his age, and if opposed, fell into silly passions. What he desired he cared not how he obtained. At length slight symptoms like chorea came on: he appeared not to have entire command over his voluntary muscles, and his limbs were occasionally a little contorted. His eyes, too, without object, were in rapid motion. His speech was slightly impeded.

These symptoms gradually increased, until becoming too unmanageable for a public school, he was placed under a private tutor.

When aged fourteen, he was brought to London for my opinion. He appeared then to be a stout lad, with a healthy complexion. The conformation of the head was good, but larger in its proportions than common. The expression of his countenance denoted a degree of vacuity. He hesitated in his speech a little, and then uttered his words suddenly. He was constantly in action. He desired almost every thing he saw, and attempted to gain it with force and violence, and if restrained, broke into furious passion. When on his pony, he could no longer guide it properly. He had lost all knowledge of the classics, and only amused himself occasionally for a short time with childish books and pictures. All the corporeal functions were natural.

While in the country, he had been repeatedly and largely bled, and other depletory measures had been pursued.

This plan greatly reduced him, and most likely aggravated the case. I examined the spine with care, but no mischief there was perceptible. I therefore suspected organic disease of the brain.

A year afterwards his tutor wrote to me, that "he was gradually growing worse, his senses were more impaired, his movements were more restricted, he was perfectly harmless and good-humoured, and his health continued sound." In short, he was quite in a state of chronic fatuity; and four years afterwards he became wholly paralytic and died.

Sometimes acute demency seems an idiopathic affection, unmixed either with melancholia, or mania, or organic disease.

The two following may be classed as acute cases of fatuity, though the latter was complicated with melancholia: —

Miss ———, aged twenty-four, of a scrofulous habit, fair complexion, and very cheerful and lively disposition, was suddenly attacked with pain in her head and slight fever, her bowels having been previously much constipated, and menstruation irregular in quantity. The pupils of the eyes were contracted, there was great susceptibility of light, and the pulse was quick. There was little other constitutional disorder.

The cerebral symptoms did not yield to the means used, and in few days slight delirium followed. The fever subsided in about a fortnight, and the pulse became slow but unequal. The pupils of the eyes now became excessively dilated, fixed, and insensible to the rays even of the sun. A complete state of fatuity rapidly followed. The powers of sensation and volition were suspended; she was insensible to the calls of nature; if solid food was put into her mouth, she did not masticate or retain it. All her nutriment was given, therefore, in a liquid form, of which she would swallow a part when conveyed far into the mouth with a spoon. She neither spoke nor walked except when led. In fact she was a mere automaton.

After continuing in this state four months without the least variation, she suddenly and unexpectedly exhibited

signs of amendment. The first favourable symptom was the instant return of sight; consciousness soon followed; and every function, corporeal and mental, was so rapidly resumed, that at the end of fourteen days from the restoration of her sight, she was in full possession of all her faculties.

Eleven years have since elapsed without her experiencing any symptom of this affection.

The treatment of this case consisted in local abstraction of blood, by alternately cupping on the occiput and by leeches behind the ears, which were repeated six times, with intervals of eight or ten days; blisters were applied to the nape of the neck, and afterwards a seton was introduced and continued. She used the warm bath, was purged briskly twice or thrice a week, took mercury as an alterative for two months, gradually increasing the dose, and the tincture of digitalis thrice a day, commencing with fifteen and ending with forty minims. At the same time she was well supported by abundant nourishment. But I must acknowledge I did not perceive that any remedy had a sensible effect on her mind.

Miss ——— possessed youth, fortune, accomplishments, and a very amiable disposition; but from excessive indulgence and an ill-regulated education, had very little command over her feelings. She was constitutionally one of the most nervous and sensitive of beings. She enjoyed good health, but the catamenia had always been scanty and irregular, and had been obstructed some months.

Excepting some little perplexity connected with a particular subject, about which she rather worried herself for some days, and having just before experienced a great fright, which had made her more than usually susceptible, there was no moral cause for the subsequent disorder. She felt, however, her spirits discomposed and unequal, with frequent fits of abstraction — a habit not unusual with her. In a few days she betrayed some

incoherency in conversation, and was oftener absorbed in reverie. In two or three days more, slight symptoms of violence occurred. A week after this she was brought to town.

When I visited her she received me politely, and answered all my questions readily; but immediately, in a childish and peevish tone, and in a rapid way, reiteratedly asked for a friend, who was dearer to her, she said, than all the world. It was the expression, in fact, of an infant for her favourite nurse; and when the lady came, she fondled her in a childish manner. At other times she would sit in absolute abstraction, and when roused, cry for her friend in a whining tone, although, perhaps, she was present; and when she made any request, it was in the same, or in an impatient, way. She had all the terrors, too, of a nursery child, fancying she saw ghosts and demons, and heard terrible noises, and at night would bury herself, if not prevented, under the bed-clothes, as if to avoid them.

Her countenance had neither a maniacal nor a melancholic, but a very silly expression. Her head was very hot, and when asked, she complained of a great noise in it; the face was flushed, eyes red, tongue white, pulse quick, and slight pyrexia.

She was placed under the control of a judicious nurse.

I ordered the hair to be shaved off, and twelve ounces of blood to be abstracted from the scalp, an evaporating lotion to be applied constantly to her head, a brisk purgative, and saline draughts, with ten minims of tincture of digitalis every six hours, and as her extremities were cold, pediluvium. Diet to be very simple.

All the symptoms were next day evidently relieved; she was more sensible and composed, and had slept without expressing her usual alarms.

In a short time it became evident that the presence of her friend always excited her. I therefore denied them

all further intercourse. For a few days Miss —— was very importunate for her friend's society, but at length it wore off.

Every two or three days the symptoms of cerebral excitation returned, and they were generally relieved by the means described. The evaporating lotion, and cold of any kind to the head, was always particularly agreeable to the patient. Abstractions of about eight ounces of blood from the head were repeated thrice in the first fortnight, and continued with longer or shorter intervals, according to the urgency of the symptoms, till the external marks of cerebral irritation ceased. The purgatives were repeated once or twice a week.

In about six weeks many boils formed and matured, but without mitigation of the mental disorder.

Her sleep was now a good deal disturbed, and when so, her mind was crowded with all sorts of phantasies. I tried the effect of large doses of the extract of henbane: at first it produced sleep; but the phantasies were then continued while awake in the day. All narcotics were therefore abandoned.

At the expiration of three months there was great improvement: she was infinitely more rational, took interest in many things, and that without being roused so to do. As the presence of any acquaintance always agitated her, and revived the illusions, all intercourse with them had been interdicted; but I now permitted, as an experiment, the visit of a very sensible old friend. She was much gratified by it, and bore an interview several times very well; but it was remarked, she was always more abstracted afterwards. In a few days she relapsed, and was worse than ever.

She now expressed the same foolish and morbid affection for her maid, an old servant, as she had at first done for her friend; and it then became necessary also to remove her. Alternately she was completely unconscious of her

own wants and every thing around her, or would exhibit all the pettish waywardness of a child ; yet at this very period, if I or her other medical attendant came in, it roused and steadied her ; and while we conversed, she would answer correctly, and ask questions that evinced her memory was unimpaired ; but if the conversation were discontinued, she relapsed into forgetfulness.

Since the first attack she never exhibited violence or vindictive feeling, but submitted to every remedy, took her medicines with readiness, and was content with very little and the simplest food. She was totally indifferent to dress and appearance. Indeed she would, if at liberty, unwittingly strip off her clothes, and commit acts betraying total want of reflection. The same trivial punishments as might be inflicted on a naughty child, such as tying the hands together with a riband, or slightly fastening her to a chair, or the gentlest scolding, always produced momentary attention and amendment.

In about a month this paroxysm abated, and she more quickly than before arrived at the former point of convalescence. She now asked for her drawing and painting materials : she could not, however, trace a figure or a flower ; but she amused herself by colouring little penny prints. If she attempted to write, the letters were unconnected scrawls ; and if a book were given to her, she looked only for the prints in it. She had now been confined to one floor nearly five months ; for every attempt to change her apartment, or even the sight of any passing object in the streets, always revived her hallucination, and she fancied she saw friends long since dead, or something horrific.

At length I tried the effect of a thorough change of scene, and took her a ride in my carriage on a quiet road. She was quite passive and abstracted, yet answered properly when asked a question ; but she expressed no gratification. Next time I carried her into the Regent's Park,

which was a new scene to her; but nothing arrested attention except when it was pointed out to her.

She now came into the drawing-room, but she always felt alarm, and would not for a moment be left alone; and when evening came, sought her chamber as the securest place.

At this period she could read fluently, but remembered little of it a few minutes afterwards; and when she wrote a letter, she began right, but presently betrayed her incapacity by repeating the same phrases and leaving the sentences unfinished; yet at this time, when roused, she could converse quite sensibly.

The cerebral excitation having apparently ceased, she had been for some time taking tonics and using the shower-bath.

By degrees she gained a little more courage; and as I had quite obtained her confidence, I encouraged her to draw, write, and read travels; and I set her little tasks to accomplish before I saw her again. I found she made progress. At length she preferred two requests,—to have a piano-forte, and to be allowed to read a favourite moral author's work which had been sent her. I readily allowed the latter, but deferred the former, being fearful of the effect of music on one so susceptible; for I had remarked, that when she heard music in the streets, it produced a painful emotion, agitation, and then greater abstraction. She read many passages of the work to me, and thoroughly understood it. Soon after I consented to the piano-forte being introduced. She was greatly delighted, and played, with correctness and without notes, pieces she had formerly practised.

But the effect was **too** much for her; she became more and more abstracted, all her illusions returned, and again she sank into a state of unconsciousness, but without any external signs of cerebral excitation.

A morbid association of ideas now revived the recol-

lection of an absent friend, and caused similar ridiculous professions of attachment to those which she had before expressed towards others; but this state sooner subsided.

Seclusion in her room, quietude, giving her a purgative every third day, and continuing the chalybeate, in a fortnight nearly restored her; but perfect consciousness was still wanting. At this period she bore an interview with a near relation without any ill effect; and being roused, she evinced the excellence of her memory and affectionate feeling by the kindest inquiries.

She was now removed to a house in the environs of town. I accompanied her, and was sorry to observe that she imagined she saw friends on the road who were either dead or far away. Here she had an opportunity of taking abundant exercise in a good garden, without observation from strangers—a circumstance which always excited her suspicion and apprehension. I walked sometimes in the garden with her for an hour. On these occasions more confidence seemed attained; for she expressed great delight, and would converse with perfect sense and her usual freedom. By degrees, she thought herself secure when walking with her nurse only.

A young lady of whom she knew little, though acquainted with her family, now came to manage the household affairs, and to associate with her when she could bear it. She soon reconciled herself to this companion; but the sight of old friends always disturbed her.

She remained here three months. Still her fits of abstraction frequently occurred, during which she neither recollected meals nor any other natural wants; yet at times would read, draw, work, walk, and skip with a rope, or play at battledoor and shuttlecock, for exercise' sake, or enter into any other amusements with her companion and nurse. Every night her imagination, however, was haunted with phantasms; and if she went into

the drawing-room fronting the road, she converted every passenger she saw into a spectre. Yet at this very period it being expedient to know her opinion on some circumstances which regarded her property, she clearly comprehended the subject, and gave the most prompt, sensible, and decisive directions relative to it.

One day she expressed greater uneasiness than usual when I went to see her. I could not discover the cause; but at last was told, that she had learnt I was negotiating for a longer term in the house where she then resided, to which she confessed she had a great dislike, for she could never go up stairs without her imagination being haunted. Another was immediately hired, and the removal to it seemed a source of great satisfaction to her. Several weeks elapsed before any material change took place either in her bodily or mental health. Tonics, an occasional aloetic purge, the bath, exercise, and every species of amusement that could rouse her from her reveries and illusions, were persevered in. Up to this period her memory was so little retentive of immediate circumstances, that if asked of what she had partaken at dinner, though that instant eaten, she could not recollect it.

The first symptom of returning corporeal health was a slight appearance of the catamenia. At the next expected period the feelings indicated its return, but it failed. About ten ounces of blood were abstracted by cupping on the sacrum; and at the next period the menses occurred, and afterwards continued. The mind now sensibly improved. She took an interest in affairs before indifferent to her, and resumed her musical exercises with much pleasure and good effect; and the letters which she now wrote were perfectly correct, yet brief. But her absent fits still intervened, though not, as before, with complete unconsciousness.

I now permitted the services of her faithful and attached maid, and finding that she bore this well, I intro-

duced the friend also with whom her ideas had first been morbidly associated. This proved a lasting gratification. She ventured on short airings in her own carriage. At first she was very timid and confused, and sometimes her imagination wandered a little, but she always became composed before the ride finished. She was then allowed to see whom she pleased, and was led to look forward to be freed from all restraints.

Thus, as nearly as possible, a year had elapsed from the access of this malady before convalescence was insured. She remained where she was a few weeks longer by way of probation; and I paid her occasional visits, rather to watch any deviation than prescribe for her.

Although recovered, yet there was some degree of mental weakness; and as a vivid sense of all the degrading circumstances of her illness was left, I strenuously advised that, when she removed from her present abode, she should not immediately return home, and within the circle of her former associates. She therefore went to a place where there was variety to divert, and at such a distance that she might occasionally see her intimate friends, or those she chose to select. She continued the shower-bath, and every species of exercise that could conduce to invigorate the system and strengthen the mind.

In about six months she recovered fortitude enough to return to her native place, nor did she experience any other emotions from the change than those of happiness.

During the whole of this curious and exceedingly interesting case, and when the understanding was in so perfect a state of abeyance as to be no longer under the control of volition, no thought, no word, no action escaped, but what might emanate from the purest mind.

Expense was fortunately no object here; and, happily, the relations of the patient placed unlimited confidence in her medical attendants. As the case was tedious, they

were assailed, as is too common, by many meddling friends, to induce their interference with the plan prescribed. Had her relations felt less confidence, and yielded to these importunities, it is very possible this young lady would have been plunged into irremediable permanent demency.

I have been led so much into detail, because it illustrates the progress and event of a rare case; and because, also, it describes the medical and moral treatment which was pursued, and exemplifies the practice I would recommend in similar cases.

Cerebral vascular excitation was decidedly exhibited during the first four or five months, and the symptoms of it always yielded to the remedies indicated and applied. The case, therefore, was treated on the same principles as I would prescribe in cases of ordinary insanity or delirium where cerebral excitation was apparent. But, owing to the attendant symptoms of fatuity, I was more particularly circumspect in watching the effect of the local depletions; and as soon as the symptoms of cerebral excitement subsided, tonics and an invigorating plan were prescribed. Possibly it will be admitted that the event justified these views and the consequent practice.

The character of the mental derangement was clearly the delirium of fatuity; there was neither the frenzy nor violence of mania, nor the despondency and obstinacy of pure melancholia. Perception, which in either of the latter affections is commonly preserved, and judgment, which is in error only on particular points connected with the prevailing delusion, were in this case suspended; and there were all the other attributes described of acute demency. When roused by my visit, perception and also recollection were, during my stay, perfect: that the judgment, however, was impaired, was evident. So likewise were the powers of combination; for if writing materials were given her, after penning the first few

ideas, they were reiterated, and presently some illusions followed ; so that all was chaos.

Comparing the symptoms of cerebral excitation which so uniformly characterise the incipient stages of mania and melancholia, with those of acute demency, we must be led to the conclusion, that they are all varieties of the same affection.

But, contrasting the state of the intellectual organ in chronic demency with that which probably exists in acute demency, we must infer that in the latter there is too much excitement and activity of the cerebral functions; in the former, too little.

In chronic demency, the brain, as has been said, is probably in a state of atony, or what Cullen calls, collapse. This opinion is fully supported by the well-known effect which the re-action produced by an attack of fever has upon the mental faculties, so long as the febrile excitement continues. A perfect and permanent restoration of reason has followed a paroxysm of fever, even where fatuity in its worst form has persisted many years.

Of the effects of fever in cases of fatuity I have quoted several striking examples (pp. 127 — 131), when discussing the influence of the circulation on the intellectual powers.

The ancients in many places, and Thomas Willis* in particular, refer to the effect of fever in removing fatuity.

Indeed, so decided is the effect of fever in suspending, and often in curing demency, that could we as readily inoculate fever, and define the limit of its operation, as we do that of variolous infection, it might be applied as a remedy in the treatment of this form of mental derangement.

* De Stupiditate, sive Morosi.

Demency often degenerates into complete idiotism. In this state remedies are useless. But such patients are rarely reduced to so low an ebb of human existence as to be quite insensible of all former habits. I saw a curious example a few years ago of the impression of military subordination on the mind, when all the faculties were so deteriorated that little else than animal instinct remained. On visiting the Military Lunatic Asylum at Rochester, Dr. Murray, the resident physician, ordered the superintending sergeant to shew me the incurables. Accordingly, I went into a yard where were assembled about twenty patients, who had, during their military service, become fatuous and idiotic. Upon the sergeant giving the word, order! the poor creatures, many of whom were reduced to mere automatons, fell into a straight rank, and presented themselves to my inspection. It was, indeed, a striking illustration of the force of habit, when the sense which originally dictated compliance was obliterated. Doubtless, many fatuous may be influenced by superior management; but we must not expect those who never were impressed with order, will obey its dictates when they are divested of reason.

A very few observations will comprise all I have more to observe on the treatment of demency.

When it appears an idiopathic affection, as in the last case I quoted, I have nothing to add either to the moral or medical plan therein pursued. Of course, as no two cases correspond in all points, the treatment must vary with circumstances.

If it be a symptomatic affection, and complicated with mania or with melancholia, it should not thence be necessarily concluded that the attack is about to terminate in chronic demency, and its relief be abandoned.

Except when there are the clearest proofs of increased vascular action in the brain, as heat of the head, flushing

of the face, and quicker action of the vessels supplying the brain, all depletory and exhausting remedies must be avoided. Even in acute demency, such remedies generally must be very cautiously used. Unless the above train of symptoms of excitation come on, the patient should rather take tonics, use the bath, and be well supported.

Where demency is consecutive to fever, excessive hæmorrhages or evacuations of any kind, or any debilitating causes, it is obvious that every means should be adopted to repair, without stimulating too much, the sources of supply and nourishment.

In chronic and senile demency also, the vital energies must be adequately sustained, and the patients should reside in a pure, warm, and dry air.

Epilepsy often produces demency; probably by weakening the nervous system. Out of 289 epileptics in La Salpêtrière, a thirtieth part of them degenerated into chronic fatuity.

The diseases which prove most fatal in chronic demency are generally organic; or those attending the cachectic state, and therefore never inflammatory. The majority die of phthisis, or of cerebral affections, such as paralysis, and that species of apoplexy which proceeds neither from sanguineous nor serous effusion, but from that state which I have acquiesced in describing as *apoplexia defectiva*.

The mortality consequent on demency is, as may be supposed, great. It is computed at one-sixth in La Salpêtrière, and in Esquirol's private establishment at four in ten. This is a proportion exceeding by one half that of mania and melancholia together.* In the French hospitals more than a fourth in the first stage of fatuity have died of scurvy.

Comparatively with the French, there are very few

* Esquirol, *suprà cit.* p. 289.

fatuous in English asylums, and the proportion of mortality, even in relation to that number, is infinitely smaller.

Scurvy, which commits such ravages in the former, is unknown in the latter, where diarrhœa is the most frequent termination of chronic demency.

COMMENTARY XI.

IDIOCY.

IDIOCY is a congenital or an acquired defect of the intellectual faculties.

Pinel says, idiocy consists in an obliteration, more or less absolute, of the functions of the understanding and the affections of the heart.* But to this definition I object, as to *aliénation mentale*, that it implies a previous possession of intelligence. Obliteration, therefore, can only apply to idiocy acquired subsequent to the development of an understanding.

Congenital idiocy may originate in mal-conformation of the cranium, or of the brain itself. Acquired idiocy proceeds from mechanical injury of the cranium, by which the functions of the brain are lesed or impeded, or from an injury or disease which that organ has sustained: it follows also from excess in sensual pleasures, habitual drunkenness, excessive depletions of blood, masturbation, extenuating diseases, study too intense or wrong directed, and from profound moral causes, as terror, fright, extreme joy, &c.

In the congenital state, the external senses are often wanting or defective, as well as the intellectual, and life is commonly of short duration; in the acquired, the external senses may be quite alienated, or be only partially affected, but they have been once perfect, and life may be protracted to old age.

Absolute idiocy admits of no cure. The mental facul-

* Nosographie Philosophique, tome iii. p. 138.

ties and external senses have been so impaired by injuries done to the head, as to give all the characters of idiocy to a person; and yet a surgical operation, or nature herself, has restored those faculties. When depraved only by the vices and moral impressions referred to, the mental faculties have been restored by the access of fever, a paroxysm of violent mania, or by such means as have, directly or indirectly, imparted fresh energy to the brain. But in this latter case the event of recovery shews that the mental faculties were in a state of demency, rather than of idiocy. For idiocy signifies an irremediable condition of the mental faculties; demency, of whatever duration, except when there is organic lesion of the brain, or it be the effect of old age, implies a capability of their restoration.

Whenever the term idiocy is applied to a fatuous condition of the understanding, unfortunately it is construed into incurability. From this confounding of terms I fear that some are consigned to oblivion, who, being only in a state of acute demency, might have become useful members of society. However degraded the mind appears, the origin of that state should be carefully inquired into: if it proceed from a defect of nature, there is nothing to be done but what compassion for a hapless fellow-being dictates; if it be from injury to the head, the skill of surgery may sometimes afford relief; if from disease, excessive depletions, extenuation, or moral cause, provided no organic change in the organ of intelligence has followed, means which invigorate the constitution and restore the suspended energies of the brain may still effect a cure.

To describe the characters which denote idiocy were quite superfluous. There are doubtless different grades of incapacity as well as of capacity; but they cannot be disguised, and need not delineation.

PART III.

TERMINATIONS OF INSANITY.

THE terminations of mental derangements are,—1. *Recovery*; 2. *Relapses* and *Recurrences*; 3. *Incurability*; 4. *Mortality*. We will consider them in this order.

COMMENTARY I.

RECOVERY.

FEW popular errors have been more prejudicial, either to the interests of science or humanity, than that insanity is commonly incurable, and, consequently, that all remedies are useless. This was not the conviction of the ancients:

Et quoniam mentem sanari, corpus ut ægrum,
Cernimus, et flecti, medicinâ posse videmus.

And happily, the experience of the present age, as we shall shew, clearly demonstrates, that a very large proportion of the insane recover the perfect use of their understanding.*

* The presumption that few insane persons recover has tended to strengthen, as a natural consequence, the popular error, that insanity is a malady much more prevalent than formerly. This is one of the errors relative to insanity which I have endeavoured to combat (see *Inquiry*, &c. p. 54). I have there advanced, that “it may be considered as an axiom, which the annals of insanity fully support, that there never

Recovery may assuredly take place spontaneously, unaided by art; but this occurs rarely indeed, in comparison with the number who recover when submitted to remedial means. If the proportion which recovered thirty years ago be compared with the present, this conclusion is proved.

All organs, once morbidly affected, make slow approaches to health; hence the return to sanity of mind is commonly very gradually accomplished. When the recovery is sudden, we must infer that the functions only of the brain have been deranged, but lesion of the organ itself has not been sustained.

In the proportions in which lunatics recover, continue insane, or die, a material difference will be found; and so likewise will there be in the collateral diseases to which the patients are subject. The regulations of every establishment differ in many respects:

was, in any country, a sudden increment of insane persons, without some powerful and evident excitation, physical, moral, theological, or political. While the condition of a people is prosperous, and uninterrupted by violent and sudden changes, insanity never exceeds. But when the dispensations of Providence fail of their accustomed bounteousness, or man by trouble is afflicted beyond his nature, or, by his own wilfulness, overleaps the bounds which nature and reason define, then insanity is engendered, and an increased number of lunatics indefinitely swells the catalogue of human calamities."

And, from a careful examination of every register and document that could throw light on this interesting subject, I came to the conclusion that, comparatively with "the progress of the population, the demonstration is clear, that insanity is not an increasing malady." The extended observations of eight years since that opinion was formed still further confirm it.

Esquirol refers to my conclusions on this point as regards England; and, having instituted a similar inquiry in France, has published a *Memoir* on the question: *Existe-t-il dans nos jours un plus grand nombre des fous qu'il n'en existait il y a quarante ans?*—(*Mém. de l'Académie Roy. de Médecine*, tome i. 1828.) His inferences are,

1. That the writings of authors, particularly of Pinel, have powerfully

the lodging, diet, occupation, and amusements (if any), classification, and treatment, moral and medical, of the patients, are dissimilar; so likewise, therefore, must be their results.

Many causes have tended to encourage the opinion, that recovery from mental derangements was a singular occurrence, and none more so than the veil of secrecy which is always endeavoured to be thrown over it.

The patient is generally withdrawn from the circle of his acquaintance before his insanity is known. Hence it frequently happens that such persons having recovered in a short time, return into society without a suspicion being entertained of the reason of their absence.

Many families are as cautious to conceal the imaginary disgrace of insanity as if it were a disease self-imposed, and the result of some heinous moral offence; and the means to which they resort to prevent the dis-

contributed to incite an interest for the insane, and, consequently, to induce a belief in the increase of the malady in France.

2. That the great number of insane sent to asylums since they have been improved, encourages this belief.

3. That as the increase is only apparent, it is not true that insanity is a calamity peculiar to the present time.

My conviction is, that if a fair investigation now took place, the number of insane persons in Great Britain and Ireland would be found diminished since my Inquiry in 1819. With this view, I have, within these five years, made several attempts, through the favour of Lord Binning (now Earl of Haddington), and my friend, William Manning, Esq. M.P., to procure returns to the House of Commons of the number of lunatics in all the public and private asylums of the kingdom. Even the returns of 1819 were very defective and inaccurate; but those since made are so much more so that they are utterly useless.

I have, therefore, no other ground for my conviction of the general diminution in the number of lunatics, than the pleasing and incontrovertible fact, that wherever asylums for insane persons have been established, from the superior mode of treatment, both medical and moral, the number who recover is much greater than heretofore; and, consequently, that the aggregate number of the insane must be lessened.

covery, though sometimes very singular, yet often succeed to effect that object.

It follows, therefore, that the most successful and meritorious examples of the cure of insanity rarely obtain publicity. No *eclat* attends them. The physician by whose skill they are accomplished is never even alluded to. That gratitude and admiration which prompt the convalescent and his friends to be loud in the praise of him who has performed a brilliant cure in other diseases, either medical or surgical, is, in a case of insanity, however appreciated, silent and circumscribed. There is only the darker side of the picture presented to the view of the public; and, consequently, an undeserved reproach attaches to the healing art, and the impression that insanity is generally incurable is strengthened.

Derogatory as the confession is to human nature, yet it cannot, nor ought to be concealed, that there is another cause often operating and always detracting from that degree of success which might otherwise attend the treatment of this malady, and which rarely applies to other cases; and that is, the indifference, nay, often the disinclination, of interested relations of lunatics to their recovery. The application of remedies, if not openly negatived, is often begrudged. Want of confidence in all human aid is sometimes urged for declining it, and sometimes the want of means to defray the expense; but the objection too frequently, I fear, arises from less pardonable motives.

In fact, pride, suspicion, deception, avarice, ignorance, and caprice, separately or conjointly, are too often opposed to the free agency of the physician in his endeavours to cure insanity.

Unfortunately, too, every one reasons upon a case of insanity as he would upon the ordinary diseases of humanity; and, guided by what he knows of the latter and their results, expects the same from the former; yet

nothing can be more distinct than insanity is in every feature from all other diseases. Hence a degree of impatience arises, quite incompatible with, and very inimical to, success.

It is impossible, perhaps, to obtain an exact comparison of the number of recoveries in other diseases with those of insanity. Were that practicable, I am confident it would be found that, *cæteris paribus*, more recover from this than from most maladies.

To form an accurate estimate of the proportion which the recoveries bear to the number afflicted with insanity, and whether the ratio be progressive or retrogressive, I collated the registers of different lunatic institutions at distinct and distant periods, and published, in 1820, the result in the form of a comparative table of cures.* This retrospect is sufficiently recent to shew the relative degrees of success in different asylums where the medical treatment of the insane is attended to.

The returns of many superior establishments, and likewise a few of a contrary description, are included; in order that the contrast between a well and a badly conducted lunatic asylum may be seen and justly appreciated.

I am conscious that this table is defective in several essential points; and that neither the medical nor moral philosopher will find all those particulars in it for which he looks. But for the purpose of shewing whether insanity permits of cure, and in what proportion, it is a more ample and satisfactory record than any extant.

In order to render its contents as useful as possible, and to do justice to the respective asylums, the relative number of cures, when that could be ascertained, at distinct successive periods, is inserted; and, as far as my

* Inquiry, &c. p. 20.

information allows, some classification of the cases is attempted. The registers of many institutions for lunatics do not admit of any arrangement of the cases; and the regulations of others differ so widely, that the description of patients which one receives, another rejects; consequently their returns cannot accord.

The aggregate of admissions, on which the centesimal proportions of cures are calculated, is in the first column of the table. The cases are distinguished as *recent*, *old*, *recent and old*, and *complicated*; by which latter term I mean insanity combined with fatuity, idiocy, epilepsy, &c. For each class a separate column is assigned; and I have inserted the relative proportion of cures each bears. Most of the authorities are appended to the table, which is placed opposite this page; and where not quoted, were derived from the medical officers of the establishment. Further, for greater perspicuity, the asylums receiving complicated cases are printed in *italics*. Fractions of units are omitted.*

Upon examining the annual reports of the various British lunatic asylums since the publication of this table, I do not perceive any material difference in any of them. Certainly none retrograde.

It should be remarked, that the Stafford Asylum, which admits various classes of patients, and the Lancaster and Yorkshire West Riding (Wakefield) County Asylums for pauper lunatics, were, when the table was first published, in their infancy; and the proportion of cures in each was relatively small, as it must be at the commencement of all similar institutions. But it will be seen that, calculating on the aggregate of all the admissions, the number of cures in them is not inferior to other institutions.

* The general accuracy of the table, I conceive may be depended upon; for since it was published, in 1820, no one has impugned it.—B.

A COMPARATIVE TABLE OF THE CURES OF CASES IN INSANITY IN DIFFERENT INSTITUTIONS FOR LUNATICS.

PUBLIC ASYLUMS.			Centesimal Proportions.				PUBLIC ASYLUMS.			Centesimal Proportions.			
			Aggregate of Cases.	Recent Cases.	Old Cases.	Recent & Old Cases.				Aggregate of Cases.	Recent Cases.	Old Cases.	Recent & Old Cases.
BRITISH.							FRENCH.						
1	Aberdeen	1814-15	21	—	—	33	22	a La Salpêtrière	1804 to 1813	2,749	—	—	62
2	Bedford	1812 to 1819	176	—	—	37	—	b Ditto	1806 to 1807	—	86	—	55
3	a Bethlem (London) cured and discharged	1684 to 1703	1,294	—	69	—	23	Bicêtre	1807 to 1813	1,196	—	—	45
	b Ditto	Ditto	8,874	—	29	—	24	a Charenton	1803	499	—	—	36
	c Ditto	Ditto	1,664	—	34	—	—	b Ditto	1806	363	—	—	42
	d Ditto	Ditto	4,830	—	39	—	25	Armentières (Maison de Détention)	1811	94	—	—	3
	e Ditto	Treatment completed	1817 to 1820	364	—	54	26	Lille (Ditto)	1811	88	—	—	1
4	Cork	1798 to 1817	1,431	—	—	40	ITALIAN.						
5	Exeter	1801 to 1819	615	—	57	—	27	Genoa	1816	138	—	—	2
6	Glasgow	1814 to 1819	457	50	13	41	GERMAN.						
7	Hereford	1817 to 1819	47	—	49	—	28	Vienna (Joseph's II.)	1803 & 1805	1,116	—	—	36
8	Lancaster	1816 to 1819	231	—	—	25	29	Berlin (La Charité)	1806 to 1818	2,190	—	—	43
9	Leicester	1795 to 1819	483	—	66	—	30	Sonnenstein (Saxony)	1814 to 1816	189	24	—	12
10	Liverpool	1816 to 1819	135	—	30	—	31	Celle (Hanover)	1816 to 1818	204	—	—	32
11	Manchester	1766 to 1819	2,415	—	39	—	PRIVATE ASYLUMS.						
12	Montrose	1805 to 1815	154	—	22	—	BRITISH.						
13	Newcastle and Durham	1806 to 1817	402	—	40	—	32	Laverstock	1817 to 1819	150	71	—	51
14	Norfolk (cured and discharged)	1814 to 1819	243	—	48	—	33	Droitwich	to 1816	619	76	17	45
15	Norwich (Bethel)	1813 to 1819	260	—	52	—	34	Spring Vale	to 1816	144	84	35	60
16	Nottingham	1812 to 1819	336	—	33	—	FRENCH.						
17	Retreat (York)	1796 to 1819	253	85	35	44	35	a Dr. Esquirol's (Paris)	1801 to 1813	335	—	—	52
18	St. Luke's (London) Treatment completed	1751 to 1819	10,641	—	48	—	—	b Ditto	—	66	—	—	62
—	Ditto	Ditto	5,735	—	49	—	36	Dr. Dubuisson's (Ditto)	to 1816	300	—	—	59
—	Ditto	Ditto	4,906	—	46	—							
19	Stafford	1819	116	—	26	—							
20	Wakefield	1819	138	—	19	—							
21	York	25 years	2,445	—	45	—							
—	Ditto	1815 to 1819	134	45	12	33							

(1) Parl. Rep. 1816, App. p. 41. (3) a Stow's Survey of London, chap. 26. b Haslam's Observ. &c. p. 245. c Ibid. p. 249. d. Parl. Rep. 1815, p. 131. e Ann. Rep. (4) Hallaran on Insanity, edit. 2. p. 34. (5) Ann. Rep. (6) Ibid. (12) Parl. Rep. 1816, Appendix, p. 21. (16) Ann. Rep. (18) Ann. Rep. (21) a Hist. York Asylum, App. p. 6. (22) a Rap. sur l'Etat des Hôpitaux, &c. à Paris. b Carter's Acc. of Foreign Hosp. 1819. (23) Rapport, &c. (24) a Dict. Scien. Medic. tom. xvi. p. 204. b Compte rendu de l'Admin. centr. en 1807. (25) Annuaire Statistique du Depart. du Nord, année 1813, p. 184, et suiv. (26) Ibid. (27) Foderé, Traité du Delire, tom. i. p. 588. (28) Ibid. p. 587. (29) Report of La Charité, 1818. (30) Dr. Pienetz's Rep. (Nasse's Journ.) Nov. 1818. (31) Dr. Bergmann's Rep. April 1819. (32) Dr. Finch's Private Commun. and Parl. Rep. 1815, p. 50. (33) Parl. 1816, p. 45, 51. (34) Ibid. 1815, p. 128. (35) a Dict. des Scien. Medic. tom. xvi. p. 204. b Esquirol sur les Passions, &c. p. 22. (36) Du Buisson, Traité des Vesanies, p. 38.

✍ The Return for Liverpool (No. 10) was in 1819 very variable: when a sufficient number of pauper lunatics was received into this Asylum from the neighbouring parishes to fill a public conveyance, they were transmitted to the Lancaster County Asylum. This practice equally affects the results of both Institutions.

Stafford Asylum — from 1818 to 1828, admissions 1000—Cured 429, or about 43 in 100.

Lancaster County ditto—from 1817 to 1825, admissions 812—Cured 322, or about 39 in 100.

Wakefield County ditto—from 1819 to 1826, admissions 917—Cured 384, or about 42 in 100.

Lunatic asylums have, since 1820, been built in Cornwall, Lincolnshire, Gloucestershire, Oxfordshire, and Suffolk.

Not content with reports only, and desirous of extending my information by personal observation, I have visited, within the last six years, the following asylums, public and private:—Bedford, Nottingham, Wakefield, York, Quaker's Retreat at York, Newcastle and Durham, Lancaster, Liverpool, Manchester, Stafford, Gloucester, the Military Asylum at Rochester, Oxford (before it was occupied), Glasgow, Edinburgh (Morning Side), St. Luke's, Bethlem and Guy's Hospitals; and likewise Droitwich (Mr. Rickett's), Laverstock (Dr. Finch's), Brislington (Dr. Fox's), and several other private establishments.

From this extensive survey I drew two very satisfactory conclusions: first, that among all the provincial asylums, excepting one, there was much to commend, and nothing to condemn but what arose from locality or faults in the designs of the buildings; and second, that a most laudable emulation prevailed to improve the system of treatment to the uttermost the means each respectively afforded.

The remarkable discrepancy displayed in the proportions of cures in different institutions, cannot escape notice, and requires some comment. Reasoning *à priori*, we may naturally infer that the results will always correspond with the means adopted for the treatment of lunatics, and that these must be greatly influenced by the rules for the admission and duration of patients in asylums. The objects, economy, and regulation, indeed,

of public asylums often differ as much from each other as they necessarily do from those of private asylums; and nearly the same diversity prevails among the latter as among the former. Again, even under the most judicious management, much difference in the degree of success must obtain from local circumstances. Nobody will expect the same results in Bethlem and St. Luke's as in the Quaker's Retreat, or in the asylums of Nottingham, Stafford, Exeter, Gloucester, or Glasgow, or in the Military Asylum, or in those of Wakefield and Lancaster. Even the very site and construction of such edifices must produce different effects on the curative system.

Besides, the objects for which these establishments are intended differ. I shall briefly detail the essential distinctions in British public lunatic asylums. They may be divided into three classes:—1. Those which are entirely eleemosynary, or are supported partly by an income, funded or landed, but arising from benevolence, and partly by voluntary contributions. 2. Those which are supported partly by voluntary contributions and partly by pensionary patients, paying according to a certain gradation of rank. 3. Pauper lunatic asylums, founded under Mr. Wynne's Act, at the expense of the county, and wherein the patients are supported by their parishes. In all these, except where there are patients taken on profitable allowances, or any officer of the establishment is remunerated according to the number or ability of such pensioners, at least a common interest prevails, if no better feeling operate, to facilitate the cure, and consequently the discharge, of every patient.

Private asylums are also of different descriptions. In some, nothing more is professed, unless especially required, than kind usage and safe custody; while, in others, the means of cure are not only professed, but sometimes very efficaciously employed: the first are

commonly under the superintendence of unprofessional persons; the second are generally under that of a member of the faculty.

The destination of these institutions being as dissimilar in England as they are in France, it might be wise to imitate the French custom, and to both kinds attach a characteristic name: the former the French call *Maisons de Détention*; the latter, *Maisons de Santé*, or *Pensionnats*.

In Willis's time (1685), hospitals for the insane were clearly viewed in the character of the former; for he expressly says, that inveterate mania was rarely subjected to medical treatment, and that insane persons were merely placed in them to be under discipline, either to recover, or prevent their doing injury to others or themselves.

In Great Britain and Ireland, imitating France, public institutions for lunatics should be called *Hospitals*, (*Asylum* is not appropriate); and private ones be contradistinguished as *Houses* for the *Cure*, and *Houses* for the *Care*, of Lunatics. The license for the former should be entrusted to medical men only; and for the latter be granted to any person proving that he has sufficient means, and an unimpeachable character.

I have observed, that lunatic hospitals and asylums vary exceedingly in their regulations. For instance, the two metropolitan lunatic hospitals, Bethlem and St. Luke's, impose certain exclusions unknown in any other British asylum, public or private. They reject all patients who have been above twelve months insane; those affected by paralysis, however slight; epilepsy or convulsive fits; idiots; the aged and weak; those discharged uncured from other hospitals; the venereal and the pregnant: besides, every patient who is seized by any acute or chronic disease likely to be fatal; and all who have not recovered at the expiration of one year's trial, are dismissed. Each hospital has two classes of

patients, *incurables* and *curables*: the one considered hopeless cases, and the number always continuing the same; the other receiving the aids of medicine and regimen, and varying in number with the applications for admission. Upon this latter class only the calculation of cures in the table is made.

There are no other hospitals in Europe that exercise this system of selection and rejection of cases; consequently, the number of cures ought to be greater, and of deaths less, in Bethlem and St. Luke's than in any other. Since 1817, when an improved arrangement was made in Bethlem Hospital, it appears, from its annual returns, that a much larger proportion is discharged cured than formerly. Considering the superior advantages this rigid selection of curable cases affords, its results should correspond; but comparing them with those of other institutions, where no selections or exclusions exist, and all kinds of cases, and in every stage of the disorder, are admitted, the proportion of cures is not so large as might be expected.

From the length of time these two hospitals have been founded, and their capaciousness, had their registers been properly arranged and well kept *ab initio*, satisfactory evidence might have been obtained of the exact relation the cures had, at different periods, borne to the curables admitted; and thence we might have been better able to judge whether any and what progress had been made towards improvement.

Most eleemosynary lunatic asylums, either for want of sufficient funds, or of room to accommodate all the lunatics who apply, exclude epilepsy and idiocy; making occasional exceptions, where the friends of the patient can afford to pay the expense of maintenance.

County pauper-lunatic asylums are compelled to receive both these classes of patients, if considered dangerous; but not otherwise.

Foreign lunatic hospitals or asylums make no exceptions: the fatuous or imbecile, idiotic, epileptic, paralytic, incurable, and at all ages, are admitted; and every chance which skill or time affords is fully given before the patient is discharged.

Such being the diversity in the views, regulations, and system, in British public lunatic asylums, any generalisation of the contents of the Comparative Table is totally precluded. But we may safely deduce from the success of particular establishments, that the ratio of cures is always commensurate with the means, and the judgment in administering them.

The returns from private asylums are so few, that no calculation of the general ratio of cures usually effected in them can be made.

In the table referred to, I have inserted the returns of three private houses, derived from the loose information given to the Committee of the House of Commons in 1815. And in order to rebut the allegations so confidently made by the framers of the Bill to regulate the Care and Treatment of Insane Persons, brought into Parliament during the present session (1828), that few recoveries took place in private establishments, I tendered to the Committee of the House of Peers the following Abstract of the Register of my own House. As it is published in the Minutes of Evidence, I shall insert a copy of it. Were not this Abstract verified on oath, its correctness in the material parts is open to be refuted by the Secretary of the Commissioners for visiting licensed houses for lunatics, whose duty it is to receive and enter the returns, or by the Commissioners themselves, who have had opportunity of examining the original.*

* Further information on this interesting topic will be found in the printed Minutes of Evidence taken before a Select Committee of the House of Peers, May 1828.

ABSTRACT FROM THE REGISTER OF CLAPHAM RETREAT FOR LUNATICS,
Delivered to the Select Committee of the House of Peers.

Insane Patients admitted from Michaelmas 1823, to Lady Day, 1828.	Patients removed to other Asylums, not improved.	Patients removed to other Asylums, im- proved.	Patients removed to their own Homes, not improved.	Patients removed to their own Homes, im- proved.	Patients died.	Patients recovered.	Patients now in the House.
146	8 N.B.—Of this number, calculating from the day of admission, 1 was removed in 2 weeks. 1 ditto in 3 ditto. 1 ditto in 6 ditto.	16	7 N.B.—Of this number, calculating from the day of admission, 2 were removed in 1 week. 1 ditto in 3 ditto. 1 ditto in 4 ditto. 1 ditto in 6 ditto.	15	15 N.B.—Of this number, calculating from the day of admission, 1 died in 7 days. 1 do. in 8 do. 1 do. in 11 do. 1 do. in 12 do. 1 do. in 14 do. 1 do. in 18 do. 1 do. in 25 do.	60	25 N.B. Nine- teen of the twenty - five were admit- ted since Ja- nuary 1827: and thirteen of these nine- teen within the last six weeks.

Verified by me,

G. M. BURROWS, M.D.

May 14th, 1828.

I hereby certify that the above is a true and faithful Abstract
from the Register of Clapham Retreat.

W. H. POLLARD, *Superintendent.*

Thus much for the degree of success attending the management and curative treatment of lunatics in British asylums.

Let us take a brief retrospect of what has been recently achieved in foreign countries to alleviate the condition of the insane.

From 1801 to 1821, 12,592 lunatics, of both sexes and in all conditions, were admitted into the hospitals of La Salpêtrière and Bicêtre, at Paris, of whom 4968 were discharged cured.*

The French government has since continued its fostering care to these objects of humanity, and has wisely and liberally bestowed every encouragement on men of science and education, to induce them to devote themselves to this interesting study, and to bring the moral and medical system of treating the insane to the greatest possible perfection.

In 1825, a very elaborate report of the state of the French hospitals for lunatics, and of the general results of the three preceding years, was made to the General Council of the Hospitals of Paris, and published by authority.† It is arranged with extreme minuteness of detail.

From this official record I shall extract the eighth table, which especially relates to our present inquiry. It shews the number admitted, the age and sex, both of those deemed *curable*, and of those deemed *incurable*, and the proportion of cures effected in each class.

* Mém. de l'Acad. Roy. de Médecine, tom. i. p. 41.

† Compte Rendu, 1826.

TABLE

*Of the Ages of the presumed Curable and Incurable Lunatics admitted into the Paris Public Hospitals,
and the comparative Proportion of Cures.*

Ages of the Insane admitted.	CURABLES.								INCURABLES.								GENERAL TOTAL.			Observations.																	
	1822.				1823.				1824.				Total of the presumed Curables.				1822.				1823.				1824.				Total of the presumed Incurables.				GENERAL TOTAL.				
	Men.		Women.		Men.		Women.		Men.		Women.		Men.		Women.		Men.		Men.		Women.		Men.		Men.		Women.		Total.		Men.		Women.		Total.		
From 10 to 19	15	11	19	11	15	11	11	49	33	82	7	16	8	3	14	29	29	58	78	62	140	The first part of this table comprises the in- sane under 50 years of age; the second, the congenital idiots, epi- leptics of all ages, and the insane above 50 years of age. The cures below 50 years of age are com- pared with the admis- sions of the same age; and those of an age above 50 years with the admissions of an older age.															
20 to 29 ..	52	71	65	81	66	78	183	230	413	10	6	16	—	15	52	15	37	52	198	267	465																
30 to 39 ..	72	103	74	98	83	87	229	238	517	7	3	10	7	2	26	19	36	55	248	324	572																
40 to 49 ..	80	99	69	88	59	78	208	265	473	8	7	11	3	4	15	23	25	48	231	290	521																
50 to 59 ..	—	—	—	—	—	—	—	—	—	47	64	37	79	48	75	132	218	350	132	218	350																
60 to 69 ..	—	—	—	—	—	—	—	—	—	43	55	37	40	39	51	119	146	265	119	146	265																
70 to 79 ..	—	—	—	—	—	—	—	—	—	29	41	24	26	23	34	76	104	177	76	101	177																
80 to 89 ..	—	—	—	—	—	—	—	—	—	—	2	5	2	—	—	7	—	11	7	4	11																
Ages unknown..	—	—	—	—	—	—	—	—	—	1	—	1	—	4	—	6	—	6	6	—	6																
Total of Admissions...	219	284	227	278	223	254	699	816	1485	155	185	146	181	125	230	426	596	1022	1095	1412	2507																
Total of Cures	103	124	97	141	99	125	299	390	689	27	29	31	26	25	37	83	92	175	382	482	864																
Proportions of the Cures to the Admis- sions in each year	1 in 2-13	1 in 2-29	1 in 2-34	1 in 1-97	1 in 2-25	1 in 2-03	1 in 2-24	1 in 2-09	1 in 2-16	1 in 5-74	1 in 6-38	1 in 4-71	1 in 6-96	1 in 5	1 in 6-22	1 in 5-13	1 in 6-48	1 in 5-84	1 in 2-67	1 in 2-93	1 in 2-90																

Hence it appears, that, comprising both sexes, and all ages from ten to ninety, of 2507 admissions, 1485 were deemed *curables*, and 1022 *incurables*. The proportion cured of 1485 *curables* is 689, or 1 in 2·16, or 46 in 100; of 1022 *incurables*, 175, or 1 in 5·84, or 17 in 100; and upon the aggregate of the 2506 *curables* and *incurables*, 1 in 2·90, or 34 in 100.

In the Royal Lunatic Hospital of Charenton, during the years 1815, 1816, and 1817,

The total admitted was 470

———— cured 177, or near 37 in 100.

By contrasting the proportions of cures, a much greater degree of success appears to have attended the curative process in the British than either in the French or German institutions; and judging from the few returns from English private lunatic houses, a still higher proportion of cures obtains in them than in the public asylums.

Medical inquirers who in their travels have visited the lunatic hospitals of different countries, have overlooked two very excellent establishments—one public, the other private, in Milan. Except these, and another at Aversa, near Naples, there does not appear any worthy of commendation throughout Italy.

I have annexed, by way of note, descriptions of these three institutions; but the Abstract of the Register of the Senavra at Milan I must insert in the text, as embracing a longer period, combined with much minuteness, than any I have seen published.

*Table of Lunatics admitted, cured, and deceased, in the
Senavra Hospital, Milan.*

Year.	Admitted.			Dismissed Cured.			Dead.			Remaining in the house on Dec. 31 in successive years.		
25 Years.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1802 ...	142	229	371	69	129	198	64	98	162	193	234	427
1803 ...	97	178	275	51	110	161	49	59	108	190	243	433
1804 ...	88	138	226	46	66	112	46	54	100	186	261	447
1805 ...	99	103	202	49	67	116	42	43	85	194	254	448
1806 ...	84	101	185	44	61	105	36	37	73	198	257	455
1807 ...	53	49	102	35	77	112	16	45	61	182	202	384
1808 ...	67	64	131	35	46	81	29	33	62	185	187	372
1809 ...	61	96	157	38	42	80	40	48	88	168	193	361
1810 ...	76	127	203	52	61	113	34	59	93	158	200	358
1811 ...	88	116	204	56	64	120	28	47	75	162	205	367
1812 ...	99	101	200	58	56	114	30	51	81	172	200	372
1813 ...	86	91	177	58	55	113	34	41	75	167	194	361
1814 ...	105	124	229	52	52	104	42	50	92	177	217	394
1815 ...	135	171	306	78	75	153	67	102	169	167	211	378
1816 ...	145	139	284	88	66	154	62	84	146	163	201	364
1817 ...	135	140	275	72	69	141	50	65	115	179	204	383
1818 ...	135	128	263	81	52	133	41	52	93	192	228	420
1819 ...	110	118	228	63	69	132	35	43	78	204	234	438
1820 ...	154	142	296	90	89	179	60	67	127	208	220	428
1821 ...	138	174	312	62	89	151	85	87	172	199	218	417
1822 ...	143	186	329	73	91	164	62	90	152	207	223	430
1823 ...	163	171	334	140	135	275	46	63	109	184	196	380
1824 ...	151	145	296	80	116	196	34	52	86	221	173	394
1825 ...	156	173	329	104	97	201	50	39	89	223	210	433
1826 ...	89	103	192	45	63	108	42	47	89	225	203	428
Totals	2799	3207	6006	1619	1897	3516	1124	1456	2580	4704	5378	10,082

The proportion of males to females admitted is as 87 to 100.

The proportion of males to females cured is as 57 to 59.

The proportion of males to females dying is as 40 to 45.

The proportion of cures to the admissions is 58 in 100.

The proportion of deaths to the admissions is 42 in 100.

The deductions from the Senavra table differ so much from those of all other lunatic institutions, that some further explanation seems requisite.

The majority of the patients admitted into this hospital are of the poorest class, chiefly inhabitants of the low and swampy grounds in the neighbourhood of Milan, who, from the joint influence of marsh miasma, and the very worst species of food, become affected with the *pelagra* — a species of cachexy inducing mental derangement. Purer air, wholesome lodging, and a good diet, recover, with little or no medical aid, a very large proportion of these poor people. If they do not get well, they spend the remainder of their lives in the hospital; but from the extenuated condition of most of them when admitted, a greater number die than in any other equally well regulated hospital in Europe. There is, therefore, no alternative but to recover and be discharged from the hospital, or to continue and die in it.*

* The accuracy of the table, and of the descriptions of the Italian institutions which follow, I can depend upon, as they are derived from my son, George Burrows, M.B., Fellow of Caius College, Cambridge, who, during a residence on the continent, has personally inspected all of them.

The Senavra, an Hospital for Lunatics at Milan.

“ A few days before I left Milan I visited the lunatic asylum, which is a short distance from the walls, and situated in a very low part of the country, with a considerable quantity of swampy ground all around. The *Senavra*, as the hospital is called, is a large brick building, which was formerly a convent, and is calculated to hold about 400 patients. The present numbers (November 25th, 1827) are 220 men and 209 women. The general appearance of the interior is extreme neatness, and good order reigns throughout. The building is composed of three floors, and is divided into male and female sides, each side having two airing-grounds attached to it. The larger airing-grounds are allotted to the convalescent and quiet patients; and the others, which are much smaller, to the noisy and furious. Each side of the building is divided into six sections of patients. The noisy patients are kept upon the ground floor, and the convalescent and imbecile upon the upper floors.

It is a source of sincere gratification to find, that the hope I formerly expressed is realised; and that the examples of England and France are stimulating the rest of

Each section on the female side has eight female attendants; those on the male side have only seven, as the men who are in a proper state contribute greatly to perform the part of domestics in cleansing the house, carrying the food, &c. Each of the attendants is allowed one day's holiday in seven. The new part of the building consists of some long, airy corridors, with cells on each side, and a day-room at the extremity, which is heated by a stove; but this room is much too small for the number of patients in the corridor. Each patient that is at all furious has a separate cell, with a window looking out into the gardens, and a door communicating with the corridor. It appears to me that these apartments must be most terribly cold in the winter season. Each of these cells has a sort of privy within it. The greater number of the patients are poor people, who have suffered from the endemic of this country, the pelagra. The convalescent women were generally employed in spinning; and the men, independent of the domestic work, labour, in fine weather, in a large kitchen-garden attached to the house, which completely supplies the establishment with vegetables. I never visited any lunatic hospital where there was less noise among so great a number. I was only troubled by some of the male patients for snuff; and I find that a certain quantity of this is allowed by the establishment, and distributed occasionally as a favour. There is a bath-room attached to both the male and female sides. The bath of surprise, which was formerly made use of here, is now given up, in consequence of the fright having proved fatal in two or three cases. Exercise in the airing-grounds, and labour in the garden, are the only means of employment. I made particular inquiries about the report of music having been greatly resorted to in this establishment; but the head physician, who is an intelligent gentleman, and who has visited the different establishments in Italy, assured me that music never had been resorted to, except as a means of diversion, in that establishment. They have a small hand-organ, which, in the fine evenings of summer, is allowed to be taken to the airing-grounds, and there some of the patients amuse themselves with it. They also swing themselves occasionally in one of those turnabouts which are seen at our country fairs in England. There is one resident medical officer, and the physician makes a daily visit. Strangers are seldom admitted to see this establishment, and never without personal application to the Director-General of Hospitals. I observed malformation of the cranium very striking among many of the patients, and

Europe to emulate them in forming establishments for the reception and cure of the insane upon the principles of true philanthropy and science. The excellent asylums

several of them with the goitrous throat. With respect to treatment, I could learn nothing particular; but the physician said, that after the first or second year, no very active measures were resorted to. The diet appears to be very good, and much more liberal than at the other establishments in Italy. Accurate accounts are kept of the previous history, of the commencement of the attack, of its continuance in the hospital, and of its termination. Examinations after death are almost always made, and registered. Previous to placing the patient in any particular section of the establishment, he is always lodged in a small room alone for two or three days, and there examined and watched, in order to determine the class of the disease."

Villa Antonini, at Milan, for Lunatics.

"The Villa Antonini, near the Porta St. Celso, in Milan, like the Senavra, was originally a convent; and although not built for a lunatic asylum, is nevertheless well adapted for that purpose, as the house is divided into a number of separate apartments, which were formerly occupied by the monks. The building is of an irregular form, and calculated, I should think, to contain about forty patients. At the present time there are thirty patients, male and female. The physician, Dr. Antonini, and his son, with the director, and male and female servants, make the establishment forty-one persons in all. The building stands at the end of a wide street, from which it is shut out by a high wall, and is bounded on one side by a large church, and on the other sides by the airing-grounds and large orchards, which extend from the house to the ramparts of the town. There are four separate gardens, one of which is exclusively for the females; another has a small mound in its centre, and is planted with shrubs; and there is, besides, a common swing, and also one of those swings which revolve in an horizontal direction. The physician said that he had found the swings of great utility as a diversion, and that the latter had answered the purpose of the rotatory chair, which is now interdicted by the medical commissioners. There is also a third small garden allotted to those patients who, by noise or dirty habits, would annoy the convalescent and quiet patients. The apartments in general were clean and comfortable, and in most of the doors there was a small opening, through which the director might observe the actions of the patient without opening the door. Much use seems to be made of baths, and there are two or three regular bath-rooms. They make their patients get into the

now established in many of the German states, in Switzerland, and likewise in Italy, where improvement is generally commencing, and the number of physicians recently

bath empty if they have any fear of the water, and then the water enters from the bottom. In one of the bath-rooms there was an apparatus for directing a steady and powerful stream of water upon any part of the patient's body, and the physician says that he has found great benefit to arise from this remedy. There is a room fitted up for music, but the only instrument in it is a piano-forte. Whenever there is a patient in the house that is musical, and that is generally the case, the patients are allowed occasionally to assemble in this room, and they make up as good a concert as they can; this has been found a most useful and advantageous means of diverting the patients. Dr. Antonini is upon the point of fitting up a billiard-room. He told me that he flattered himself the patients were in such order, that if he commanded one of them to retire to his chamber for bad conduct, he would do it without force being applied, and that this was the only manner of punishment he adopted. There was only one man with his hands confined in a muff, and he had the propensity of stripping himself naked when left at liberty. During his lucid intervals he is a most excellent musical performer: he had a most remarkable depression of the left eyebrow, and a considerable dilatation of the pupil of the same eye. A complete register is kept of all the cases, of their treatment, and of their results."

The Royal Magdalen Hospital for Lunatics, at Aversa.

"This hospital is at Aversa, a large village in a highly cultivated plain, about seven miles from Naples. The hospital stands about half a mile from the road, quite detached, with good gardens, which are cultivated by the patients. It is entirely devoted to men, and at present (July 1827) contains 230 patients of different classes of life. There are about forty who pay so much per day, and have each a separate establishment. This institution has only existed thirteen years; previous to which the insane were kept in the great poor-house, and were treated more like wild beasts than men. At that time a priest obtained permission of the government to form this establishment, and brought it into a state of order and cleanliness, and treated the inmates with great kindness, but with little medical assistance. Two years ago this priest died, and Dr. Vulpes was appointed the directing physician; and from that period medical treatment has commenced in a regular way. The baths of this hospital are good. The bath of surprise is in the floor of a moderate-sized room. The patient is blindfolded and led across

commissioned by different foreign governments to visit Great Britain, to inspect and take plans of the most approved asylums it contains, give fair promise that a system as near perfection as possible will soon every where prevail.

The capital of the Austrian empire, in which the science of medicine and all its auxiliary branches are so highly esteemed and cultivated, it is to be hoped will not long defer that improvement in the care of the insane which, in contiguous states, is so conspicuous.* At

the room, when he unexpectedly falls into the bath, the sides of which are well guarded with cushions. The practice of putting the patient into a hot bath, and applying cold to the head, has not long been employed, although now it is a very common remedy.

“The patients are almost entirely without classification, as the size of the hospital does not admit of this arrangement. In general they seemed comfortable, and I only saw four or five with their arms confined. They have numerous methods of amusing the patients. There is a theatre, many musical instruments, billiard-table, &c. All the patients who are not outrageous attend the church twice every day. I saw about eighty sit down to supper in perfect order and quietness. Dr. Salvador Catania, the very intelligent assistant physician, told me that they had commenced a medical report of the hospital this year, which they intended to continue annually.”

I may add to this account, that, in the same spirit of improving lunatic establishments which seems to pervade almost all foreign states, Dr. Vulpes has lately visited Great Britain and Ireland, and other countries, in order to inspect all that were most worthy of notice. He appears to possess great acuteness of observation, zeal, and benevolence; and I have no doubt that, with so much information, he will render the Aversa Asylum as perfect as its capabilities admit.—B.

* The subjoined account of the Lunatic Asylum of Sonnenstein at Pirna, in Saxony, is from the same source as those of the Italian establishments. It is altogether on so excellent a plan, that I cannot omit the description of it.

“June 12, 1828.—This lunatic establishment was formerly the castle of Sonnenstein, and is situated on an almost perpendicular rock, two hundred feet above the river Elbe, over which it projects. The ascent has now been rendered less abrupt; and the castle, gardens, courts,

present, the lunatic establishment at Vienna is a disgrace to the capital and the era of the nineteenth century.

Contrasting the proportion of cures before the year and out-buildings, have been converted into the best lunatic asylum I have seen out of England. The building is too irregular to give any description of it. The number of patients it contains is about 120, and twenty more are in the private house of Dr. Pienetz, the head physician. We first visited a court-yard, where numbers of patients were employed in sawing and chopping wood, others drawing water from a deep well, and in fact, almost all were occupied. The bath-room is of a good size, containing eight metal baths, in which the patient may be fixed if necessary. There is an excellent apparatus for directing a powerful stream of cold water upon any part of the bath-room. In the adjoining room is the bath of surprise. Here the patient is seated in a metal slipper-bath sunk in the ground, the attendant then comes to a window about fourteen feet above the patient, and throws a large bucket-full of water upon the head. This is often made use of both as a remedy and as a punishment, and the patients complain of pain as if the lateral lobes of the cerebrum were split asunder. We next went into a large billiard-room, to which the patients have constant access of an evening, particularly during winter. In an adjoining room was all the apparatus for giving electrical shocks; but the apparatus is almost laid aside, as no benefit has been found from the most powerful application of it. They here shewed me a very well contrived tin machine, made to fit the hollow of the thigh, with straps, for those patients who could not retain their urine. The evening winter-room is extremely well fitted up with piano-fortes, violins, flutes, three or four backgammon and draft-boards, and a very good book-case, which is at all times open to the patients. They are allowed to remain here until ten o'clock, and music and these games are encouraged as much as possible. The patients, in respect to their living, are divided into three classes, according to the money that is paid for their maintenance. The first class have two small rooms for two patients, with one attendant, and they eat their meals separate from the others. The second class have also two rooms for two patients, with one attendant, but their accommodations and fare are not so good. The third class dine altogether, and are six, seven, and eight, in one room. Every six months a set of rooms is completely cleaned out, white-washed, and painted. They shewed me a very good little instrument for forcing open the mouths of patients that would not eat. The revolving bed and chair are frequently made use of both as remedies and as punishments, and the time a patient remains in them is from five minutes to a quarter of an hour.

1817 with that a century and a half ago in Bethlem Hospital, it is not a little perplexing to account for the ratio having actually retrograded. The earliest records of that institution offer evidence, which, if accurate, prove that the proportion of cures originally exceeded that at any intervening period between 1748 and 1817. Stow informs us,* on the authority of Dr. Tyson, who was physician to Bethlem, that from 1684 to 1703, 1294 patients were admitted, of whom 890 were cured: this is a proportion of two in three. From 1784 to 1794, 1664 patients were admitted, of whom 574, or rather more than one in three, were cured. And it appears from the aggregate, that the *cures* and *discharges* from 1684 to 1707, were seven and twenty per cent more than the *cures* and *discharges* from 1799 to 1814. The cause of this retrogression may be worthy of inquiry. That so large a number should have been cured,

There is also a species of tread-mill, something like a revolving squirrel's cage, in which patients are compelled to take some exercise. They have a strong room, but no dark room, for furious maniacs. There is a Protestant church and clergyman in the building, and they find that the most noisy patients are quiet during divine service. The women's house is quite separate from the men's, and is conducted upon the same plan. The gardens around the building are immense, and are almost entirely cultivated by the patients. There are various summer amusements in the gardens. At present they contain forty women and eighty men, who appear clean, orderly, and comfortable. Separate from these houses is a new house, calculated for sixteen patients and the clergyman, situated upon a beautiful slope, with an excellent garden, and most delightful prospects. This is the convalescent house, and here the ladies and gentlemen dine with the clergyman altogether. They are allowed to take walks in the environs, and divert themselves as they please. The whole establishment is well conducted."

I presume that under Dr. Pienetz's superintendence, the Sonnenstein establishment has greatly improved since 1816; for, on reference to the comparative table, it will be seen that the cures in *recent* cases were then only twenty-four per cent; and in *complicated* cases, only twelve per cent.—B.

* Survey of London, &c. &c. book i. vol. i.

though, according to Dr. Tyson, most of them had been under treatment before they were admitted, and when the exceptions were not so numerous nor so strict as at present, is remarkable. This information is the more important, since it is half a century anterior to any before published regarding the cures in this or any other lunatic institution. Surely, therefore, had not this statement escaped observation, it might have been accepted as a proof, that mental derangement was more responsive to curative treatment than has been supposed; and likewise, that the recoveries were in a ratio, considering the then state of medical knowledge, surpassing, probably, that of most other diseases.

Enough perhaps has been advanced to decide that insanity is a malady susceptible of cure, and that a very large proportion of lunatics, under a proper system of management, actually recover.

Did mental derangement experience the same prompt attention as most other complaints, it is impossible to judge how much more favourable the results might prove. The reverse almost always obtains; and therefore insanity more frequently degenerates into a chronic or continuous type before remedies are applied. All practitioners have remarked how difficult it is of cure when it has taken the latter form, comparatively with acute or recent cases. In this disposition it but assimilates to other diseases. For, be the disease what it may, whenever remedies are neglected long after its first access, there is great danger of its assuming an obstinate, if not a permanent, character.

Unfortunately, the approach of insanity, though generally perceptible to strangers, is rarely remarked by relations. We are all apt to shun that which is painful or displeasing. So the insidious approaches of mental derangement are rather construed into nervous irritability, or eccentricity, or any thing rather than the truth; and

are suffered to proceed till some terrible exacerbation of delirious fury or despondency ensues. A malady is thus often confirmed in one whom we most value, and whose intellects very probably might have been preserved, had timely aid been administered.

How frequently do we witness the bitterness of self-accusation, and the unceasing regrets of the near connexions of lunatics, because they have persevered in this wilful blindness till the calamity they deprecated has occurred! Assuredly, the approach of intellectual disorder sometimes escapes the most intelligent observer; while bodily ailments, from the derangement of some ordinary function, or from acknowledged pain, are at once visible: consequently, the remedy in the one case is unsought, which in the other is immediately applied. Thus the chances of cure in mental and corporeal complaints are, in a variety of ways, rendered unequal.

Even under these and many other disadvantages, incontrovertible proofs have been adduced of how great a proportion recover. And were it not that when evidence militates against preconceived notions it is always pertinaciously rejected, we might have been convinced, years ago, that insanity was cured in a ratio equivalent probably to what is experienced in most disorders. Thus, a celebrated physician was discredited when he stated, that *nine out of ten* cases of insanity would recover if medically treated *within three months from the attack*.* Doubts of his veracity were implied; but we now see, that, in situations perhaps less promising, eight in ten, and even six in seven *recent* cases, are credibly reported to have actually recovered!

The difference of the result between recent and old cases, and the superior success of early and active medical treatment, is indeed astonishing, and fully confirms

* Parl. Report, 1789.

the Celsean axiom, *quò vetustior est longus autem, quò recentior eò facilius curatur.*

Irrefragable as the testimony uniformly is of the great success attending the treatment of insanity, yet I shall venture to declare my belief, that the utmost success hitherto recorded falls short of that which is attainable.

In my former publication* I stated, that on the aggregate of all the cases I had had under my care, including patients in a state of fatuity, idiocy, and epilepsy, the proportion of recoveries was 81 in 100; of recent cases, 91 in 100; of old cases, 35 in 100.

These proportions, when stated eight years ago, though not disputed, appeared by some to be doubted. But the testimony of other authorities to which I have referred, and the subsequent annual reports of various public lunatic institutions, fully establish them. And further experience in a wider field of observation confirms my former statements.

Extraordinary as it may appear, yet it is a fact, that no detailed or even general result of private practice in the treatment of insanity has ever been published by any British practical author. I do not recollect one who has attempted to elucidate the subject by a candid statement of the relative proportion of cures to the cases occurring within his personal experience.

A defect so remarkable almost justifies the reproach of foreigners, that the many learned English writers who have written on mental affections, have displayed greater fondness for speculative disquisition than practical induction. And hence another reason for that general scepticism common in this country on every matter connected with insanity or insane people.

It is obvious, that the study of mental derangement

* Inquiry, p. 48.

partakes of all the incidences attaching to a disease, the proximate cause of which is a mystery, and the mode of treatment unsettled; therefore, any conjecture on the degree of improvement which may be attained would be presumptuous. However, we certainly have not arrived at the maximum. The obstacles to that consummation are indeed numerous. Nevertheless, they are not to be imputed to a defect in knowledge or enterprise in the faculty; for although possessing every physical and medical qualification, and evincing the most ardent zeal, yet the necessary resources are rarely at command. Indeed, few physicians possess the pecuniary means requisite for undertaking the charge of the insane, and treating the malady agreeably to such plan as their experience might dictate. Even the outfit of such an asylum for the reception of insane patients as a philosophic mind would plan and like to conduct, is beyond the ordinary resources of professional men.

Were equal confidence evinced in his physician by the friends of a patient in cases of insanity as in ordinary chronic and surgical diseases, the success would be commensurate. But success much depends on unconstrained volition in directing the means; this being denied, a proportionable limit is imposed on exertion. This has been a cause obnoxious to the improving of the medical treatment of insanity, but not of other diseases.

There must be a revolution of public opinion in England respecting insanity as a human malady, and also in respect to those who professionally attend or superintend the care of lunatics, before that point of excellence will be attained which I am persuaded is within reach.

A most laudable emulation has been elicited throughout Great Britain. The spirit of improvement has gone forth, and if properly encouraged and regulated, will leave nothing for humanity to desire contributory to the comfort or recovery of the insane.

If so much have been accomplished through means which, I will venture to assert, however much desired or sought, have been scarcely ever adequate, and often notoriously deficient; and notwithstanding the visionary speculations of some, and the ignorance of others, which are eternally counteracting the wisest ordinances,—who can refrain from contemplating without a prescient hope, what might be achieved, were the requisites at command, and were more enlightened views to predominate?*

* What will foreigners say, who yearly, in admiration of our lunatic establishments, visit Great Britain for the purpose of inspecting them, and acquiring a more perfect knowledge in the treatment of the insane, if they should chance to peruse a Bill “To regulate the Care and Treatment of Insane Persons,” which passed a British House of Commons without dissent in the year 1828? or what will posterity think? Will the former credit their senses, or the latter the records of the time, when they compare the descriptions of these lunatic institutions, and the annual reports of the number of recoveries effected in them, with the proposed enactments? Will they believe, that at an epoch esteemed enlightened, when any member of a family is visited with a paroxysm of insanity, the sacredness of private affliction must be intruded upon and violated by an examiner when a Secretary of State chooses? Or, that if a physician have advised for such patient that he or she should be removed from home to a private lodging, that it cannot be done without the examination and certificate of two other medical men? that the name and connexions of the patient are also to be set forth and registered, and a return of such removal and circumstances, and of all subsequent changes of lodging, are to be made to the said Secretary of State? It was also enacted, that even physicians who have devoted themselves to the treatment and care of the insane—gentlemen, in fact, of the highest education and character—should be subject, in the strict performance of their professional duties, to prosecution for innumerable misdemeanours, and liable to the infliction of penalties, and the pains of imprisonment and hard labour, that is, the tread-mill, in a common gaol! Besides, their property, and—what to a professional man is dearer than all—his reputation, was placed at the mercy of discarded servants and others, who were not only invited, but rewarded for becoming informers, although participators in the very offences for which they had laid the information! Such are a few of the provisions by which improvement was to be accomplished! Certainly no measure introduced into parlia-

ment ever betrayed greater want of information, and consequent misconception of a subject.

How presumptuous to imagine, that without any practical knowledge or information, minute legislative enactments can be framed for improving the treatment of the insane!

If any thing is to be feared that may check the progress of improving the treatment, moral and medical, of the insane, it is these absurd attempts to effect it by legislation. The inevitable consequence is to disgust honourable and well-educated men, and to deter them from pursuing a branch of the medical art, in the exercise of which they cannot be free agents, and which marks them as degraded and unworthy of public confidence.

Had such an act passed as was originally proposed, the charge of the insane would thenceforward have been consigned to those whose sole object is pecuniary advantage.

Let those who feel an interest in the question examine and compare the printed evidence in support of the Bill before a Select Committee of the House of Commons in 1827, and that before a Select Committee of the House of Peers in 1828; and they will then be able to appreciate some portion of the mischief which would have ensued.

Truly has Montesquieu said, “ C’est une expérience éternelle, que tout homme qui a du pouvoir est porté à en abuser; il va jusqu’à ce qu’il trouve des limites. Qui le diroit? La vertu même a besoin des limites!”

Happily, the wisdom of the House of Peers has interposed, and saved the afflicted lunatic and the public from the injurious consequences of such a measure, and also those who had devoted themselves to the charge of the insane, from a great part of the odium attaching to it.

The Act is an experimental one for three years. In the course of that time the *argumentum ad hominem* may be severely felt, and prove the gross outrage it commits on domestic as well as on professional rights and feelings.

COMMENTARY II.

RELAPSES AND RECURRENCES OF INSANITY.

THE interpretation of relapse, as applied to mental derangement, has given rise to much misconception. Its real signification, in reference to any disease, is, I apprehend, regress from a state of convalescence to the original malady. But in the sense it is generally used in relation to insanity, it is extended to a mere iteration of the malady, whatever interval of health may have passed since recovery. This is a manifest error. In the one sense it is plainly a *relapse*, in the other only a *recurrence*.

Many have argued, that it is useless attempting the cure of insanity, because relapses are so common, and therefore have declined medical aid.

If every recurrence of this disease be considered a relapse, it will certainly be found to happen very frequently; but if we assign to each phrase its real meaning, and look to what occurs in other diseases, we shall conclude that, comparatively, a relapse is more rare than has been imagined.

A relapse, then, is only when a malady returns, from the effect of which a patient has scarcely or very recently recovered. It may take place a few weeks, or two or three months, after an attack of insanity, provided that certain symptoms, the sequelæ of that affection, have not entirely ceased.

The precise time when a cure may be pronounced to be solid, it is impossible to fix. Most, for weeks, nay months, after they have recovered, experience uneasy

sensations or confusion in the head; and I venture to offer it as a maxim, that so long as any uneasiness or anomalous sensations are felt in the organ of the mind, the cure is not complete, nor can a just confidence be placed in its stability. But when these sensations entirely cease, and every function is restored and duly performed—when, in fact, the health is perfect,—the cure is complete, and any subsequent access of insanity is, as in other maladies, a simple recurrence of it, and no relapse.

Some organs are more than others disposed to take on the diseased action which they have once sustained; and the brain seems peculiarly so disposed. Nay, contrary to the constitution of some organs, each successive attack makes a more durable impression on the brain; but the analogy between this and other organs or textures still obtains. If insanity attack the one, and fever, pleurisy, sore throat, jaundice, &c. the others, and the patient recover, and years roll on free from disease, and then the respective parts experience similar attacks, should we in any of these cases recognise them as relapses?

When, therefore, any organ is similarly affected for a second, or a third, or a fourth time, it is still a recurrence only of the disease. So the brain, like other organs, having been once morbidly affected, may take on that action again and again. When gout, asthma, &c. recur, we do not say it is a relapse.

When the functions of the liver, as in jaundice,—or when the symptoms of inflammation, as in pleurisy,—are early attended to and judiciously treated, those disorders will the more readily yield, and the danger of their return be proportionably diminished. So, likewise, with the functions of the brain in insanity. If the symptoms of cerebral disturbance be early noticed and judiciously treated, they also will the more readily yield, and the danger of their return will be proportionably lessened.

Insanity becomes intermitting or periodical in some constitutions; so, also, do other complaints. Without searching for the reason why, we must remain satisfied with knowing, that these are proofs of aptitude in organs to observe periodicity; or to renew at any time a morbid action which has already been, though only once, inflicted. But periodical attacks cannot rank as relapses.

Versatility is not peculiar to any disease; but in none are we more frequently flattered by favourable signs and find them recede, than in insanity.

Nature herself may cure a disease, and likewise insanity; but if it be left to that course, insanity will run on for a longer time; and in proportion to the time the brain sustains a morbid action, so will be its readiness to resume it at shorter intervals. Medical art, by curtailing the duration of this morbid action, not only prevents a relapse, but also the disposition to recurrence.

Men are said to be less subject to relapse than women. There are certainly causes, both physical and moral, likely to induce insanity in the latter more than in the former; and therefore it is very probable.

The danger of relapse will always be governed by circumstances.

If imprudent measures be adopted before convalescence has ripened into sound health, a relapse is almost inevitable. As soon as convalescence commences, the vigilance of the physician and attendants must be redoubled.

The first duty is to separate the patient, if in an establishment, from his late associates; but absolute and immediate removal from the situation he is in, whether a private lodging or an asylum, is scarcely ever prudent, however much it may be urged; for the aptitude to relapse is so great, that the very exposure to new scenes and circumstances may prove too agitating or exciting

for the brain, enfeebled by a great and long-continued conflict, to bear. This risk must be encountered upon mixing with strangers, and persons unaccustomed to the caution and delicacy with which convalescents ought to be treated. The instability of the recovery so often deplored, is commonly to be attributed to a too hasty removal, or a too early communication with objects of strong affection or interest.

All authors agree in ascribing the frequency of relapse to too early a removal. Dr. John Monro went further, and coincided with Mead in thinking, that the danger of relapse being always great, every thing prescribed for the cure, such as medicines, diet, exercise, &c. should, when it is effected, be continued at intervals for a considerable time after recovery. This is very judicious advice; but it will be very difficult indeed to persuade the patient or his friends of the additional security to be derived from adopting it.

If necessity, or the regulations of a public asylum, compel the friends of a convalescent to remove him sooner than is prudent, he ought not to be taken home, or to any place where his insanity commenced, or where, by any association of morbid ideas, painful or exciting recollections may be revived. The scene should be new to him, and the situation cheerful and healthy, affording the means both for exercise and recreation. Whenever the novelty of that situation is worn out, and low spirits or *ennui* is exhibited, the scene should be changed, and repeatedly, till the mind has acquired strength, and can advert in conversation to every social connexion without emotion, and a natural and temperate desire to resume former intimacies and occupations is evinced.

The middle and poorer class are more apt to relapse than the rich. The reasons are pretty obvious; for the former go from the asylum direct to their misery, and the exciting causes, perhaps, of their derangement—while the

latter can afford to take all those intermediate precautionary steps I have detailed before they return to their homes; and when it is judged proper for them so to do, they have a better chance of being greeted by every circumstance which can disperse unpleasant recollections, solace the mind, and offer a prospect of future felicity.

It is in the convalescent stage that relapses most frequently occur; consequently the greatest caution is then necessary lest the patient should retrograde.

A very common source of relapse is the highly injudicious manner adopted towards convalescents when they first join their family circle. Formerly, lunatics were exposed to the public gaze, and viewed with as little reflection and pity as if they were wild beasts. Too much of this barbarous feeling still prevails; so that even now, when a recovered lunatic returns home, he is looked upon as if just escaped from a menagerie. Some shew openly their apprehension, others their incredulity of his recovery. Again, some idly interrogate him, or, from mistaken kindness, torment him with questions daily on the state of his mind, and thus remind him of what he would fain and naturally wish to bury in oblivion.

It may be supposed that none but the unfeeling and the ignorant can be so inconsiderate; but such conduct is too often pursued by those who ought to know better: and if it were confined to the ignorant, the remark is not the less appropriate, since it is to instruct the uninformed as well as the unreflecting that these observations are offered.

When the convalescent returns to the bosom of his family, because he has been pronounced recovered, it is presumed his treatment does not require extreme delicacy and tact. The contrary is the case; the greatest caution towards him should be observed. Every thing should be done that can divert the mind from a retrospect, and

that can lead prospectively to hope. Above all things, the recent malady must never be alluded to. Practise forbearance towards little eccentricities which will sometimes obtrude, and leave to time, the *vis medicatrix naturæ*, its full influence and effect.

If too intense application to any subject, or excess in drinking, or any particular sensual gratification, have been the remote cause of mental derangement, and the same habits are resumed before recovery is firmly established, a relapse is certain, and is not the fault of the disease, but of the individual, or of those who have the power and do not restrain him. Every recent disease is liable to be reproduced by imprudently seeking the exciting causes, whether physical or moral.

It sometimes happens, that during the mind's estrangement and the patient's seclusion, circumstances have occurred deeply afflictive, involving his affairs, or the happiness of those whom he tenderly loves, and which must come to his knowledge upon his restoration to society. A powerful conflict, whether of passion, grief, remorse, or disappointment, is then suddenly raised, and a relapse is the consequence. Human foresight cannot always guard against such accidents.

Real relapses are most common among pauper lunatics; and the causes of them are to be attributed to their very poverty. It is feelingly observed, in the annual Report of the Wakefield Pauper Lunatic Asylum* (1827), that "it not unfrequently happens, that the patients, when they have recovered and are about to be discharged, learn, for the first time, from some relative or friend, that during their confinement their houses have been broken

* Wakefield, it is to be remarked, is situated in the manufacturing district of Yorkshire, and its Lunatic Asylum contains a large number of manufacturers, who are always liable to great vicissitudes in their circumstances. Accordingly, we find that more relapses are registered in this admirable establishment than in any other.

up, their little furniture sold, their children sent to the workhouse, and want and misery left them as their only portion." What a picture is this! The Report sensibly adds: "to overcome such difficulties often requires an energy their weakened minds no longer possess; and after a short struggle with their calamities, they again relapse into disordered intellect, and often become worse than when first admitted."

If the poor peasant or workman have the ordinary feelings of human nature, what must be his sensations when, full of gratitude and thankfulness to a beneficent Providence for his recent recovery, he prepares to return to his home and the bosom of his family, and finds that home and that dear family no longer offering him shelter and solace? Is a relapse under such afflictions wonderful?*

The probability of relapse is always in a ratio with the suddenness of recovery, and therefore is commonest in mania. The melancholic temperament is more permanent, and is slower in being provoked into action than the maniacal. The moral causes likely to depress the spirits are much more numerous than those calculated to raise them, and therefore favour the frequent occurrence of melancholia. But recurrences are most frequent in the latter, and, as well as relapses, are very apt to occur when tinged with religious fears.

At certain seasons, persons of the melancholic cast, when their minds are seriously turned to religious duties, fasts, and humiliations, are inclined to experience mental

* In a spirit of true philanthropy, funds have been raised to afford clothes and provide means of support to discharged criminals, to prevent, from the pressure of actual want, the temptation to sin again, ere employment can be found. Does not a more worthy object for compassion present in the recovered discharged pauper lunatic, with a mind honest and willing, but enfeebled by a visitation of Providence, and perhaps as utterly destitute as the criminal?

aberration. The lady whose case forms Example 1, Commentary II., became insane thrice at Easter, after the preparation for and the observances of Lent; and is an instance of recurring melancholia from religious feeling. At such periods pious Catholics are said frequently to become melancholics.

It has been observed, that the brain which has sustained the maniacal action, like every other organ once morbidly affected, is more liable to experience the renewal of that action than a brain which has never been so affected. This maxim, in relation to the danger of relapse, should never be forgotten by those who have been insane, or by their friends who know that fact.

The danger of a relapse or recurrence is announced by a train of nearly the same corporeal symptoms as preceded the first access of insanity, only perhaps in a less degree. Every one who has experienced insanity must know whether he has been exposed to causes sufficiently exciting, and whether he feels that symptoms have succeeded which have a strong analogy to those which were precursory to a former attack. If he esteem the possession of his intellectual faculties and personal liberty as blessings, he will adopt preventive measures, and consult his physician.

I will repeat that, if there be obtuse pain in the head, a sense of weight, confusion of ideas, disturbed sleep, with rushing of blood to the head, or throbbing of the cerebral vessels, and great heat of the scalp, suspicion ought to awaken. Moderate bleeding in this case, or cupping or leeches to the head, is indicated: purging, vomiting, pediluvium, an issue or seton, or producing an artificial eruption on the skin by the application of the tartarised antimonial ointment, are prophylactic remedies. If the menses be diminished in quantity, or obstructed, the loss of a little blood is particularly advisable. Cupping on the sacrum in such case relieves the uterine vessels.

The French, as usual, recommend in the case of a female leeches to the vulva, and in the male sex leeches to the anus, as a derivant.

Whether from ignorance of the possibility of preventing the return of insanity by prophylactic remedies, or whether from an insurmountable repugnance to confess the apprehension of an affliction which is most absurdly considered as a degradation, it is impossible to tell; but the truth is, that nothing is more rare than a person who has been insane applying for advice how it may be prevented, although well-known symptoms announce the danger. I fear no arguments that I can adduce will eradicate this repugnance. I shall not, therefore, attempt so useless a task.

I have thus endeavoured to explain the nature of a relapse, as well as the difference which exists between it and a recurrence of insanity. Ignorance on this point has led to many unhappy consequences, which better information will, I trust, in future avert.

Re-admissions under the head of Relapses, are entered in the registers of some British public asylums; but the intervals between the dismissal as *cured*, and the re-admission as *relapsed*, are omitted in their annual reports. Consequently, it is impossible to determine how many, according to the distinction I propose, ought to be considered as *relapses*, and how many as *recurrences*. Referring again to the Wakefield Report (1826), twenty-six of one hundred and twenty-two admitted, or *one in six*, had experienced previous attacks; and it is observed, that “fewer from *relapse* have been sent in this year in proportion to the general number admitted, than in any preceding one.”

The Paris Register* records very particularly the re-admissions of those discharged positively, and those pre-

* Comptes Rendus, Tab. No. 11.

sumed, *cured*. This table is divided; one compartment shews the number re-admitted from *natural consequences of the primitive attack*; the other, from *fresh accidents or causes* after the patients have been in society for perhaps years.

AVERAGE OF RE-ADMISSIONS IN 1822, 1823, AND 1824.

Relapses from Natural Causes.

	Men.	Women.	Total.
1 Three months	31	5	36
2 Six months	12	8	20
3 Nine months	6	5	11
4 Twelve months	5	8	13
	<hr/> 54	<hr/> 26	<hr/> 80

Relapses from fresh Accidents or Causes, at various remote periods.

	Men.	Women.	Total.
21	7		28
5	2		7
5	4		9
1	3		4
	<hr/> 32	<hr/> 16	<hr/> 48

In the last division the cases are all decided *recurrences*; and in the first, except those re-admitted within three months, I rank them under the same class.

Comparatively to the annual admissions, the proportion of relapses from the natural consequences of the primitive attack, says the reporter, is no more for the *men* than an *eighteenth*; for the *women* a *thirty-fourth*; the medium for both sexes being a *twenty-sixth*; and if the number of the relapses be compared with that of the annual cures, the proportion for the *men* is a *fifth*, and for the *women* a *tenth*; the medium of both sexes being a *seventh* and a *half*.* The proportion of re-admissions or recurrences from fresh accidents or causes is, of men a

* Suprà cit. p. 20.

twenty-second ; of women a fourteenth ; of the two sexes the medium is an eighteenth.

The reader cannot fail of being struck at the immense disproportion in the number of relapses of the two sexes. The reason is satisfactorily explained.* It solely arises from the much longer detention of the women in the asylums than of the men after they are pronounced cured. The medium residence of each *man* discharged *cured* is four months and fifteen days ; that of each *woman cured* nine months and twenty-five days ; the medium sojourn of both sexes being seven months and fourteen days.

This fact forcibly exemplifies the utility of a long detention after the cure of insanity is actually accomplished ; and the means of so doing gives a great superiority to the French over British asylums in this respect. Thus, in the French asylums, the proportion of *relapses* to the *admissions* is in both sexes only a *twenty-sixth* part ; while in the Wakefield, which perhaps is the best public asylum in England, the proportion of relapses to the admissions is as high as a *sixth*.

So long a detention of lunatics in our public asylums after recovery as is permitted in the French, would be contrary to the principles of English jurisprudence and to English prejudices ; neither could the funds, perhaps, to support them during this space of probation be supplied from eleemosynary sources. But there can be no doubt that a great saving would eventually result, whatever fund furnished the means of supporting lunatics in public asylums, if, instead of being discharged so soon as they are pronounced cured, the term of residence were prolonged to confirm their recovery. The humanity of such a regulation is too faithfully represented in the Wakefield Report, to which I have just referred, to require further

* *Suprà cit.* p. 30.

argument. It is undeniable, however, as a medical conclusion, and applicable to all cases of insanity, that precipitancy in removing the recently restored patient from proper supervision and regimen is highly dangerous, and a principal cause of so many relapses.

The detention of the patients, especially the women, for so considerable a space after they have recovered, not only very much diminishes the probability of relapse, but renders it likely that almost all who are re-admitted into the French asylums ought rather to be considered as recurrences than relapses. In either case, from a review of the above table, it is clear, that whether proceeding from the natural effects of the malady, or from fresh causes, one half of the re-admissions occur in the first three months after being reputed and discharged cured.

In the second quarter the number is reduced more than half, and in the third and fourth it successively decreases.

I am therefore, from these results and my own observations, led to conclude, that real relapses occur only in the first three months after recovery; and that all cases and re-admissions into asylums after that period are positive recurrences of insanity, from the effect of fresh exciting causes.

COMMENTARY III.

INCURABILITY.

THE proportion of the recoveries from insanity when the proper means are adopted, satisfactory as it is, leaves the painful conviction, that too many, under the best and most skilful management, pass from an active and curable to a chronic and incurable state of mental derangement or incapacity.

In all such cases it is to be presumed that the brain, like other organs long exposed to diseased action, undergoes some structural change, which renders it unfit to exercise its proper functions; hence certain, or all the intellectual faculties remain permanently deranged.

Georget conceives that in the three terminations of incurable insanity, according to his anatomical researches, the brain is affected by — 1. general atony; 2. acute or chronic paralysis; 3. chronic irritation.*

It is highly probable that the brain in every form of fatuity, as in every form of active insanity, is differently affected, or such distinct effects would not be produced; at least, as far as our pathological knowledge of the organ of the mind extends, the morbid conditions presumed by this author to exist may be correct.

A large proportion of those who fall into this miserable condition are the victims of want, neglect, or mismanagement, and many, I fear, of mal-practice.

* De la Folie, p. 438.

Incurability, therefore, is probably as often the consequence of some moral cause as of insanity itself.

Incurable lunatics have been thus divided :—1. Lunatics sunk into a complete state of fatuity, so as to be incapable of any intellectual operation, upon which state paralysis is often consequent or combined with.—2. Lunatics whose fatuity is less advanced, and whose intellectual powers are still capable of some exercise.—3. Lunatics restored to a certain degree of reason, but whose judgment being deteriorated, can only be trusted to a limited extent.—4. Lunatics whose delirium intermits, and who, during the interval, think and act rationally.—5. Lunatics, the character of whose delirium, whether furious, melancholic, or monomaniac, has continued undiminished and unchanged till death closes their wretched existence.

Notwithstanding the sentence of incurable, some so considered recover. Such recoveries, however, must rather be ascribed to the spontaneous operations of nature, than those of art. We have seen (Part I. Comm. VI.) that it is possible in long-standing cases for the brain to re-assume sufficient energy to exercise the intellectual functions, when, according to experience, the mental derangement might be pronounced permanent; and we meet with instances of persons insane, ten, twenty, and even more years, regaining their mental powers without any apparent previous cause. These, however, must be considered almost as miracles, being beyond human comprehension.

Conformably with the regulations for admissions and discharges, so of course will be the proportion of incurables in lunatic asylums.

In the Paris hospitals, the proportion *cured* of those deemed *incurable* is, in men, 1 in 5·13; in women, 1 in 6·48; the medium is 1 in 5·84.* In the Glasgow Asylum,

* Comptes Rendus, Tab. No. 8, 1826.

from 1822 to 1827 inclusive (six years), there were 161 *old* cases admitted, which were considered *incurable*; of these seven recovered, which is only 1 in 23.

In Bethlem Hospital, two or three out of about sixty *incurables* are annually discharged as being recovered.

The *selected curable* patients discharged as *uncured*, both from Bethlem and St. Luke's Hospitals, after a year's trial, (the period of probation allowed,) are usually consigned to cheap private houses for the reception of lunatics, where they are treated in a manner inferior to that which they have received in those hospitals, and no further attempt is made at recovery. The number thus allotted to permanent lunacy must be very great, but cannot be ascertained.

It appears, that from 1751 to 1826 *five thousand and sixty-eight* out of 14,050 *selected curable* patients admitted into St. Luke's had been discharged *uncured*.

Judging from the number who actually recover, both in foreign and British asylums *after* the first year, we may form some calculation of the number plunged into irremediable insanity by a regulation which expels every patient at the expiration of a year's trial.

Although cases which have existed several years may be generally considered *incurable*, as far as medical treatment goes; yet as nature in her own way often refutes all human calculations, the chance of their spontaneous recovery will be very much augmented or diminished, according to the care old lunatics receive. If they are well lodged, clothed, and fed, and are kindly used, some will recover in despite of a condemnatory prognosis.

This fact has been happily established by experience in all the newly erected county pauper lunatic asylums.

A great number of the pauper lunatics imported from parish workhouses, &c., where they had been for years

neglected, and treated as dangerous and incurable, have, in the course of the first year's residence in a good asylum, been discharged *well*, and returned to their friends ; and who, without the aids these lunatic institutions afforded them, would never have been restored.

COMMENTARY IV.

MORTALITY.

INSANITY, it has been said, is not mortal of itself. Nay, many consider it conducive to longevity. The first, as an axiom, I am disposed to question; the latter is an egregious mistake.

If insanity imply only a disorder of the ideas, then it may be true that no one ever died of it; but taken with reference, as it should be, to a disorder of the functions of a most important organ—the brain, then I contend that, *per se*, it is a frequent cause of death.

To suppose that madmen are generally long-lived, Monro contended was a vulgar error. On the contrary, he thought that madness destroyed two-thirds of those who were afflicted with it. Besides apoplexies, palsies, convulsions, &c., lunatics are subject to many chronic affections, which are the result of their own obstinacy, and the difficulty of overcoming it.

Whenever an instance of longevity in a lunatic occurs, the paroxysms have had long intervals; or the patient must have his mental faculties so much obtunded, that he is indifferent to every thing; or his derangement be of a happy, joyous character, and himself have been well provided with every comfort essential to his animal wants. Then, if he live in a regular manner, a strong constitution may carry him to extreme old age.*

* A lunatic is reported to have died in 1821, in Dr. Langworthy's establishment, after being an inmate of it sixty-nine years, at the astonish-

I repeat, that whenever the intellectual functions of the brain are deteriorated, the vital functions are also deteriorated. The healthy brain exercises an influence on the human system similar to that which the sun exercises on the vegetable system. Deprive the body of any portion of the cerebral influence, and the system becomes comparatively obnoxious to the effects of very trivial diseases. So, whatever impedes and diminishes the influence of the solar rays, proportionably injures the vigour of vegetation, and disease and death follow.

Thus we see insane persons, when attacked by some ordinary and trifling complaint, sometimes sink and expire without the intervention of any one symptom to create apprehension. One or two such instances occurred to me before it excited more than surprise; but others followed, where neither depletion, nor violent remedies, nor any coercion, had been employed. Neither could any cause of death be discovered upon the most careful *post-mortem* examination.

I have, therefore, been forced to the conclusion, that vitality itself is diminished whenever the intellectual functions are disordered, and that a sane mind is essential to constitute perfect health.

This conclusion is supported by the well-known connexion that subsists between the brain and those organs by which the essential functions of life are conducted. The former cannot sustain any lesion without some one of the latter participating, and commencing a morbid action. The influence of such lesion on the nervous system is further shewn by the singular capability often imparted to the insane, of bearing extremes of temperature, pain, hunger, &c. But these also are morbid conditions which

ing age of 104! He always enjoyed good health, and worked in the garden till within a few weeks of his death.

can only be borne for a time, and are never experienced but at the expense of the vital principle.

Insane persons may be said to die of sheer lunacy when they exhibit no marks of bodily disease; but in such cases death may be the simple effect of exhaustion, the patient being worn out by mere mental excitement, raving, and violence. This sometimes actually happens;* and I see no reason why it should not so happen, since great mental excitation, or excessive bodily fatigue, will bring on instant death.

Though mania sometimes ends suddenly in death, yet it is not near so fatal as melancholia. Few melancholics, indeed, attain old age; and where life is unexpectedly extinguished, preceded only by a sudden debility, such event occurs chiefly in this form of insanity.

In melancholia, the patient experiences all the ill effects of the depressing passions by which the mind is worn down and enfeebled, and the constitution then gives way. In mania the patient is often void of all care; he is impressed only by gay and pleasurable ideas; hence the mind is invigorated and supported, and the corporeal powers are strengthened and prolonged.

The knowledge of these facts is very important; for they must convince us that we should be as guarded in our prognosis concerning life as recovery, in many cases of insanity.

Much pains has been taken to ascertain the exact proportion of deaths of insane persons to the number of cases. The mortality in every lunatic institution, public or private, must be much influenced by locality, the number of patients congregated, the accommodations, the regulations for admission and detention, and whether they are of the poorer or better class. For instance, the

* See Tenth Report of the Glasgow Asylum, p. 6.

mortality in Bethlem and St. Luke's Hospitals, where rigid selections are made, and patients generally discharged when seized by any dangerous chronic disorder, will be infinitely less than in those where no selection or exclusion of the patients occurs. Consequently, except where the site, numbers, regulations, mode of treatment, medical and moral, and capabilities, precisely correspond, — which they do not in any two establishments, though most so in the above two hospitals, — the degree of mortality must widely differ.

I shall, therefore, select for comparison among English asylums only the county pauper lunatic asylums of Lancaster and Wakefield. They are the largest in Great Britain, admit exactly the same classes of patients, viz. the maniacal, melancholic, fatuous, paralytic, epileptic, and idiotic; all of whom may remain till they recover, are withdrawn, or die. This description equally applies to the lunatics admitted and maintained in the French hospitals, and in the Senavra at Milan; and I shall, therefore, quote the rates of mortality in these lunatic asylums also, in order that they may be contrasted.

WAKEFIELD ASYLUM.

	Males.	Females.	Total.
Admitted since it was opened in 1819 ..	468	449	917
Mortality	127	88	215

The proportion of deaths to the admissions in males is 28 in 100.
----- females, 19½ in 100.

Proportion of deaths of both sexes is 24 in 100.

LANCASTER ASYLUM.

Admitted since it opened in 1816.

Years ending June 24th.	Admissions.			Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
1817	35	25	60	3	—	3
1818	75	48	123	10	10	20
1819	35	17	52	9	2	11
1820	44	36	80	25	6	31
1821	38	22	60	9	6	15
1822	62	42	104	12	7	19
1823	63	52	115	21	12	33
1824	44	43	87	14	18	32
1825	76	55	131	18	18	36
Totals	472	340	812	121	79	200

The proportion of deaths to the admissions in males is 25 in 100.
————— females is 23 in 100.

The proportion of deaths of both sexes is $24\frac{1}{2}$ in 100.

The aggregate of mortality in the above public hospitals remarkably agrees ; but the proportions in the sexes widely differ.

IN THE FRENCH HOSPITALS.

	Males.	Females.	Total.
Admitted in 1822, 1823, and 1824 ...	1859	3138	4997
Mortality	472	619	1091

The proportion of deaths to the admissions in males is 25 in 100.
————— females is 19 in 100.

The proportion of both sexes is 22 in 100.

IN THE SENAVRA, AT MILAN.

	Males.	Females.	Total.
Admitted from 1802 to 1826	2799	3207	6006
Mortality	1124	1456	2580
The proportion of deaths to the admissions in males is 40 in 100.			
females is 45 in 100.			

The proportion of both sexes is $42\frac{1}{2}$ in 100.

Contrasting the mortality of the two English and the French lunatic hospitals, it is worthy of serious reflection, why the rate of mortality should be greater in the former than in the latter. The accommodations and arrangements in the Bicêtre and La Salpêtrière, which contain always a very large number of the imbecile, among whom the mortality is ever the most, are decidedly objectionable, and very inferior to those of Lancaster and Wakefield. So bad is this department of the French hospitals, that it is pointedly complained of in the report of the French commissioners.* The next French official report will probably shew a considerable reduction in the rate of mortality among the lunatics in these hospitals, in consequence of their meditated improvements.

In the Senavra, at Milan, an institution which is admirably conducted, the proportion of mortality exceeds that in all other lunatic hospitals. But the cause is fully explained in the description of patients admitted into that hospital.

Between the years 1798 and 1818, 1431 lunatics of all classes were admitted into the Cork asylum: the mortality was 429, or 30 in 100.

The causes of this extraordinary mortality were too apparent: Ireland during that period was visited by rebellion and famine, and all their concomitant miseries. Added to these, the dreadful vice of habitual intoxication from drinking ardent spirits, in which the poorest, from the extreme cheapness of this liquid poison, indulge,

* *Compte Rendu*, Tabl. No. 3. † *Suprà cit.* p. 28.

sufficiently accounts for so high a degree of mortality in this establishment.

In the Glasgow asylum, since it was opened in 1812, *one thousand and forty-two* lunatics have been admitted ; and *one hundred and five* have died, or about 1 in 10. But this excellent institution partakes more of a private one than the others quoted, and its results must not be contrasted with them.

Perhaps the York Retreat is the best asylum to refer to for the rate of mortality from the direct effect of mental derangement on the corporeal frame ; since the course of the malady is there but little diverted by the efforts of art, and certainly not by the consequences of neglect or bad treatment. But the truth is, insanity was formerly in that asylum scarcely considered to be a remedial complaint ; and consequently medical aid was resorted to only when the patients were afflicted with other disorders.

From a statement with which Mr. Samuel Tuke, the philanthropic and sensible director of the York Retreat, favoured me, and which I published,* the proportion of deaths to the cases admitted since it was established was as follows :—

*Admissions and Deaths from 1796 to the end of 1819,
in the York Retreat.*

Cases not exceeding *three* months' duration, and *first* attack, 47 ;
dead, 5.

Cases not exceeding *twelve* months' duration, and *first* attack, 45 ;
dead, 7.

Cases not exceeding *twelve* months' duration, but *not* the *first*
attack, 34 ; dead, 3.

Cases not exceeding *two years'* duration, and *first* attack, 48 ;
dead, 11.

Cases *more* than *two years'* duration, 79 ; dead 27.

Total of admissions 253

Total of deaths 53, or about 20 in 100.

* Inquiry, p. 281.

Mr. Tuke on this proportion remarked, that five of the deaths were cases in a hopeless state, and took place soon after they were brought in.

I am not informed of the usual rate of mortality in any other private establishment. My own is on too limited a scale to offer any useful general inferences; but by referring to the abstract of the register of Clapham Retreat, it will be seen that the deaths were 15 in 146 admissions, or a little more than 1 in 15; but several were in a dying state when brought into the house. However, even where they are on a larger scale, private asylums cannot afford a just criterion of the ordinary degree of mortality attending mental derangement; for they do not, like certain public asylums, exclude patients with dangerous diseases; consequently many are received almost *in articulo mortis*, and when past all human skill.

But from personal observation, and from every other source of information, I am confirmed in the proposition I commenced with—that insanity simply, exempt from its complications and consequences, tends to the shortening of human life; and further, I believe that the mortality attending it exceeds that of every other disease partaking so slightly of an acute character.

Indeed, under this conviction, I hold every insane person, or one liable to a recurrence of insanity, to be a doubly hazardous life. Even those with an hereditary predisposition are for the same reason insecure lives.

PART IV.

COMMENTARY I.

PROGNOSTIC.

NATURE, it is known, sometimes in her own way effects the cure of insanity. Sometimes, however, she confirms the malady, or closes the scene by death.

These results are variously brought about, and we must become acquainted with them before any prognosis can be attempted. But of all disorders with which humanity is afflicted, there is none respecting the event of which it is so difficult to decide.

Some allege that every form of mental disorder terminates by crises, such as spontaneous salivation, an abundant flow of tears, the hæmorrhoidal flux, &c. Again I say that I never met with an instance of insanity so terminating. If spontaneous ptyalism prove critical, recoveries would probably be more frequent ; for it is a very common occurrence both in mania and melancholia. But I am strongly inclined to suspect that the cases reported to have recovered in this manner are rather coincidences, and not the specific effects of increased salivary secretion.

The maniacal action often finds a solution in various hæmorrhagic, alvine, and suppurative discharges ; also by hydropic depositions, cutaneous eruptions, and fever. But

any of these incidents may occur without remission of insanity. I cannot, therefore, call these terminations crises. It is frequently also suspended by the intervention of acute disorders; as upon the accession of pulmonary inflammation, asthma, gout, hepatitis, &c. But when some of these affections resume their proper seats, the insanity generally returns. Neither are these crises, but substitutions of one morbid action for another. Yet when they happen, recovery frequently follows.

I have seen insanity and asthma alternate for many years, the patient being always sane when asthma supervened, or insane when asthma was absent.

Mere metastatic changes, however, cannot be ranked among the terminations of insanity.

The greatest deliberation is necessary in investigating whether an attack of insanity be idiopathic, symptomatic, sympathetic, or transferred; for the remedies differ in each. The previous history of the case can alone guide the judgment and direct the practice.

If we ascertain the natural temperament of a patient attacked with mania, it is not generally difficult to pronounce whether that form of insanity will continue, or melancholia supervene; the primary morbid action in either form being identical. In both the sensorium is affected, but in different ways; in one, all the internal and external senses, and nervous and muscular powers, are exalted; in the other, they are blunted. The effect of certain stimuli on different constitutions differs: wine makes one mad, another stupid; opium induces pervigilium in this, and sleep in that person. We must, therefore, consider mania and melancholia as modifications of the same disease.

Each may end fatally. But in mania, the sensorium may be so violently acted upon as to extinguish vitality; in melancholia, life may suddenly end from the want of sufficient stimulus.

Should mania supervene on other diseases, they are usually ameliorated, suspended, or sometimes entirely removed; and if mania continue, it prolongs life often to a good old age. On the contrary, when other diseases supervene, and terminate insanity, the patient either rapidly sinks, or is cured.

Although insanity never ends by a natural crisis, but generally preserves a continued form, yet a visible decline of the symptoms takes place in most cases, and sometimes leads to a complete remission.

Such remissions may continue for days, or weeks, or more. They, however, rarely leave the patient entirely free from some mental or physical lesion; reason is still partially deranged, or sleep is still disturbed by horrible dreams, or there are some uneasy sensations in the head, &c. The patient makes no progress, and by and by the malady re-assumes its primitive form.

Intermissions are often so perfect, that the mind is capable of exercising its entire faculties. In this case there is no physical lesion. The access of delirium is regular or irregular, and the intervals are more or less protracted; sometimes it occurs every month, or six months, or yearly. When it observes nearly regular periods, it is termed periodical insanity, and is often introduced by all the stages of a primitive attack. This form is usually incurable; and by degrees the intervals diminish so much, that constant insanity at length is established.

However, in many cases nothing but time can discover whether the chronic has succeeded the acute or active state of insanity. Long-continued insanity often terminates in demency; but I must positively deny Georget's dictum, that insanity, if not cured at all, always terminates in that condition, provided the patient live so long.* I have known patients insane many years, and

* *Suprà cit.* p. 213.

who have lived to old age, the original character of whose malady persevered till death. This opinion of Georget's is derived from his observations on the insane women in La Salpêtrière, mine from private practice. A close analogy in the results of private and hospital practice cannot, in the nature of things, exist; and this may account for the discrepancy in this author's conclusions and mine on this point.

The intensity of fury which often ushers in mania commonly diminishes in a short time; and hence a prognostic favourable to convalescence is inferred. But when the accompanying delusions continue equally strong, although there be an abatement of physical violence, it is not an indication of returning reason, but leads rather to the expectation of a protracted case. Decrease of fury is on many accounts desirable. Sometimes, however, it only intermits, and the patient being refreshed by temporary quiescence, it is renewed with increased violence.

A paroxysm of mania may continue only a few hours, or days, or weeks, or longer, and then remit or entirely vanish; or it may assume the form of melancholia, and persevere or alternate with mania to its termination.

It is not possible to pronounce when the symptoms of either form of insanity will subside. The more furious the first paroxysm, the shorter, generally, but not always, is the duration of mania; and when a remission of violence is attended by an amelioration of other symptoms, it is a favourable sign. But when the malady has continued several weeks, and the whole system is evidently suffering, we may expect an obstinate attack.

When tremors, or a sudden prostration of strength, or coma, or convulsions, supervene on a furious attack of mania, with violent raving, it has a fatal termination. The same result may be feared also when any of these morbid conditions supervene on melancholia.

The appearance of moderate anasarca of the lower

extremities in recent cases of mania, is considered a favourable prognostic. If we admit that mental derangement ever has its rise or continuance in an increased action of the heart, propelling the blood in too great force or quantity to the brain, it is easy to conceive that the mental disorder will be relieved by dropsical effusions; for the circulation is thereby relieved, the heart restored to its healthy action, and the cerebral functions consequently resume their ordinary course. Parry remarks, that a pulse even in hectic fever, beating at the rate of 120 or 130 in a minute, may, by the supervention of anasarca, be in a few hours reduced to 60.*

When insanity is sympathetic, and supervening to any visceral disease, and there is rather a sudden return to reason without any apparent amendment of the organic affection, there is always just cause to suspect that a mortal event is near. The more common affections which manifest themselves in such case are dropsical. But pulmonary consumption often rapidly ensues, and destroys the patient.†

Hydropic depositions in any part in chronic insanity denote want of tone, and are always the harbinger of approaching dissolution.

There is an infinite number of other signs which mark both a favourable and unfavourable prognosis in cases of insanity. The more prominent of them have been described in the course of this work, and therefore repetition is useless.

To the question so anxiously and often asked, How long does insanity usually continue? it is perhaps more difficult to reply than in respect to any other disorder. Analogy assists our judgment least of all in this disease. As generally applicable to all diseases, so we may say in

* Elements of Pathology, &c. (ccccxii.)

† Haen. Ratio Medendi, tom. ii.

this, that the more recent the malady is, the more easy the cure. But in all cases of insanity, the duration has a striking correspondence with the time when remedial aid was given. The longer it is delayed, the more obstinate the attack. Every case, however, should be considered as an insulated one: we must take into consideration not only whether it be of recent or long standing, but the constitution, habits, and pursuits of the patient; and, moreover, the nature of the medical discipline to which he has been subjected.

Pinel calculated that the medium term of cure was between five and six months; but Esquirol conceives it should be extended to a year.

The former cites an instance of a lady who suddenly recovered after twenty-five years. I know one lady who recovered after fourteen, and another after twelve years being insane, and several at intervening periods. The latter mentions a young woman who had been ten years in a state of demency, with suppression of the menses, and who, upon their return, suddenly recovered. This fact teaches us the important lesson, that while a symptom continues of positive physical disorder, we should not despair of recovery. He further refers to the case of a female who became insane at the first menstruation, and continued so till the age of forty-two, which proved with her the critical period, and upon the menses then ceasing, she recovered her senses.

According to this physician,* from 1804 to 1813, there were 2804 insane *females* in La Salpêtrière. Of these 785 were epileptics, imbeciles, and those deemed incurable, which number subtracted from the former leaves 2019 *curables*. Of this 2019, 1233 *recovered* in the following order of time:—

* Morrison's Outlines, p. 63.

First year, recovered	604
Second year.....	502
Third year	86
In the seven following years	41
Total	1233

Into the Paris lunatic hospitals, during the years 1822, 1823, and 1824, there were admitted 1029 *men*, and 1296 *women*; total 2325, inclusive of lunatics, epileptics, and imbeciles. The number which *recovered* was 865, and in the following order: *

	1822		1823		1824		Total.
	Men.	Women.	Men.	Women.	Men.	Women.	
In the 1st month ...	53	22	43	17	47	19	201
2d — ...	33	20	28	23	23	22	149
3d — ...	14	17	12	27	5	16	91
4th — ...	12	12	10	11	11	16	72
5th — ...	5	10	5	14	6	16	56
6th — ...	5	12	3	4	3	12	39
7th — ...	1	12	4	14	4	12	47
8th — ...	1	7	1	4	4	7	24
9th — ...	—	4	—	7	2	7	20
10th — ...	1	3	1	5	2	2	14
11th — ...	—	3	5	6	—	3	17
12th — ...	—	3	—	5	3	5	16
Total in the 1st year .....	.....	.....	.....	.....	.....	.....	746
In the 2d year	2	17	10	20	8	10	67
3d —	3	8	2	6	4	8	31
4th —	—	2	—	2	1	3	8
5th —	—	1	2	2	—	3	8
6th —	—	—	1	—	1	1	3
7th —	—	—	1	1	—	—	2
Total after the 1st } year .....	.....	.....	.....	.....	.....	.....	119

* Comptes Rendu, Tabl. No. 14.

After the seventh year of admission, no instance is recorded of recovery in this Table; and when it does occur after that period, it must be considered a rare instance.

We see that, with an exception only in the seventh, the number of recoveries gradually diminishes every month; and that after the first year it rapidly declines.

Comparing Esquirol's with the results of the latter Table, it will be observed that there is a surprising difference in the number of recoveries respectively ascribed to the second and subsequent years. I cannot reconcile this discrepancy.

It results, that the prognostic of most forms of mental derangement being so uncertain, the greatest caution should be observed, lest in delivering an opinion we speak in error. In one respect it were far better to err by giving a favourable than an unfavourable prognostic. While hope is held out, efforts will be continued, and every attention paid to promote recovery. If hope be denied, the case is inevitably consigned to chance; and there is no probability of recovery left but from the efforts of nature.

Upon mature consideration of the momentous question of prognosis, with great deference I submit, that,

1. The earlier in life insanity appears, the greater is the probability of cure or recovery. I have, however, seen cases recover when the primary attack was past the grand climacteric.

2. The success of medical treatment is in a direct ratio with the recentness of the attack, and the duration of the exciting causes previous to the explosion.

3. The chance of recovery is greater on the first, and diminishes with every subsequent attack.

4. Mania is cured more quickly and oftener than melancholia.

5. Melancholia is difficult of cure in proportion to

the degree of depression and nature of the hallucination. When accompanied by a dread of poverty or poison, or perversion of religion, a long and obstinate attack may be anticipated.

6. Chronic insanity, whether mania or melancholia, rarely, but sometimes, recovers.

7. The prognosis of hypochondriasis is favourable.

8. The prognosis of puerperal mania is favourable.

9. The prognosis of a propensity to suicide is favourable, provided the patient is prevented executing his purpose, and is submitted to medical treatment.

10. The prognosis of senile insanity is fatal.

11. Acute demency is curable; chronic demency never.

12. Imbecility and idiotism are never cured; but the condition of both, as well as of chronic demency, may be improved.

13. Hereditary insanity protracts, but does not prevent the cure. Relapses and recurrences, however, are more often to be expected.

14. When insane patients are capable of judging rightly their own state, there is greater difficulty in curing them.

15. When amendment of personal appearance is accompanied by improvement of mind, recovery may be anticipated.

16. When they preserve or acquire all their natural functions, as appetite, sleep, &c., and their usual corporeal appearance, and there is no improvement in their intellectual functions, recovery is hopeless.

17. When insanity follows, or is complicated with palsy, it is incurable.

18. When following, or complicated with, epilepsy or convulsions, the prognosis is unfavourable; but I have seen such cases recover, or, at least, the patient continue sane when exempt from the clonic paroxysm.

19. Insanity is more difficult of cure in women than men.

20. After the seventh month the ratio of recoveries rapidly decline, and after the third year recovery is rare.

21. Men are more liable to relapses than women. One half of all relapses happen in the first three months after recovery.

22. Insanity, comparatively, is a hazardous disease. Melancholia more so than mania; and demency most of all. The mortality on the aggregate of all lunatics in British public asylums is about 24 in 100.

PART V.

COMMENTARY I.

CURATIVE TREATMENT.

Preliminary Observations.

THE writer in a celebrated Review, in the favourable notice he took of my “Inquiry into Certain Errors relative to Insanity,”* exhorts those who have the management of the insane, either to confirm the rectitude, or prove the fallacy, of my assumptions and conclusions on the success which has attended the attempts to cure insanity; and he particularly calls on me “to exhibit the details of those plans and practices which I have found so eminently successful; adding, that he believes me too correct to permit his entertaining a suspicion that I have a desire of concealment.” Other reviewers, as well as some medical practitioners, have obliquely hinted their doubts, if not of my veracity, at least of my accuracy.

Perhaps I had some reason to complain of want of candour in querying statements when I had honestly referred to so many authorities, both in public and private practice, in confirmation of my own individual experience and conclusions. I could not mean to claim any superiority in the cure of insanity, when, at the same time, I shewed that others had obtained nearly the same results,

* Quarterly Review, No. XLVIII. p. 176.

and under circumstances less favourable than those which I avowed I had possessed.*

I must congratulate myself for abstaining so many years from noticing these sceptical observations. Time, which confirms or refutes all evidence, has vindicated me. The proportions of recoveries which are exhibited in Commentary I. (Part III.), and in the Minutes of Evidence taken before a Select Committee of the House of Peers in the present Session of Parliament, testify beyond doubt, that wherever curative means and judicious management are employed, there the ratio of cures of insane persons will correspond and increase. Not only is the proportion of cures proved to be what I before stated, and consequently the number of lunatics thereby diminished, but the number who relapse and return into the general mass of the insane is also considerably lessened; for although nature may cure insanity, yet that cure which is effected through the medium of medical treatment always proves most permanent.

I profess no knowledge of an antimaniacal remedy, nor can I even offer the charm of novelty in my "plans and practices." My practice has been directed by those pathological views of the causes, nature, forms, and complications of insanity, which I have so extensively described. And I conceive that those descriptions will be found better guides to practice than the most minute details of cases. I have before observed, that every case of insanity should be considered as an insulated one, and so it must be treated. Remedies, therefore, must vary with the constitution and peculiar features of each case; consequently I hold that no fixed rules or formulæ can be given, or, if prescribed, be adhered to.

Hence my observations on the curative treatment will be very general. They are intended for medical

* Inquiry, pp. 20, 43, and 44.

rather than popular reading; and I must assume, that medical practitioners having perused my preliminary views of the pathology of insanity, and being from their education competent to appreciate the value due to them, cannot be greatly at a loss in applying appropriate remedies.

They who have never read the ancient authors, especially Aretæus, Celsus, Cælius Aurelianus, Galen, &c., and the Greek and Arabian writers of the middle ages, will be astonished to find that the remedial plan of treatment which they recommend, although founded on a different pathology, yet is in most points well adapted to the pathology founded on the anatomical discoveries of modern investigations.

If we give credit to the success of the ancients in the treatment of other diseases, we cannot deny belief to their success also in curing insanity. Yet, and it is a remarkable fact, their remedial treatment of insanity seems to have been nearly lost sight of in the revolutions of theories which have since had birth and died away.

Abundant hints, and a few effective ones, have been suggested by contemporary authors, but these suggestions have not generally shone as lights; for as they have oftener emanated from theoretical rather than pathological inductions, they have soon been extinguished. Indeed, they have proved mere coruscations, which flash but for a moment, though, perhaps, they have contributed in some degree to shew the shoals and quicksands which beset the course on which others have stranded.

Celsus remarks, "*Oportet autem neque recentiores viros in his fraudare, quæ vel reppererunt, vel rectè secuti sunt; et tamen ea, quæ apud antiquiores aliquos posita sunt, auctoribus suis reddere.*" I have not attempted to defraud the moderns of what is owing to them in developing the causes, or improving the treatment, of insanity; but I will acknowledge it as due to the ancients, that the practice they pursued appears to me to be generally judicious,

and that I feel more indebted to them than the moderns for what success may have attended my efforts.

Inductive evidence, therefore, aided by experience and reflection, and exemption from preconceived theories, form the basis of my views and practice.

As to the *methodus medendi* which I pursue, much may be collected from the preceding Commentaries; especially those on *Delirium Tremens*, *Puerperal Insanity*, *Suicide*, *Hypochondriasis*, and *Demency*.

An idle opinion still exists, and even pervades the understanding of those whom it might be expected were more enlightened, that insanity is a mental disease independent of corporeal disease, and that there are remedies specifically applicable to *mental* disorder; and hence the inquiry so often recurring in parliamentary investigations, whether medicines are prescribed suitable to the mental complaints of the patient? My answer is, that no mental disorder can originate except through corporeal disorder; and that the only remedies for a mind deranged are those which apply to the corporeal derangement that influences mental derangement. The physic for the mind is moral discipline: this is requisite throughout insanity: medicine is no longer so than the hope of cure is entertained.

The curative treatment, like the causes of insanity, is usually divided into medical and moral. I shall proceed in that order.

COMMENTARY II.

MEDICAL TREATMENT.

THE era when insanity first yielded to medicine is so remote as to be enveloped in the obscurity of fable. Pagan history connects the first case recorded with the first use of a purgative in a human disease. Melampus, the poet, shepherd, physician, and divine, first essayed the effects of hellebore, and with it cured the mad daughters of King Proteus; and hence its name of *melampodium*. Other authors, however, dispute the honour of this discovery attributed to Melampus, and ascribe it to an inhabitant of Anticyra, who with it cured the furious Hercules.

To whomsoever this glory be due, it still seems probable that Melampus was the first who prescribed active purging in this disease. This, together with bathing, which he conjoined, to say nothing of the poetry and charms he employed, was a happy combination; and in many cases of insanity would prove efficient.

When consulted in any case of intellectual disorder, our first duty is to ascertain, as clearly as we can, the causes of it, moral or physical, the nature of the attack, its duration, and the peculiarities of the patient's constitution, circumstances, &c.

We must also attentively consider the character of the delirium, whether it be idiopathic, originating in cerebral or meningeal inflammation; symptomatic, and simply indicative of mental derangement; or sympathetic, from a remote organ or texture morbidly affected.

If the history of the case be unsatisfactory, as it too often is, especially in hospital practice, and no symptom threaten serious consequences, it is always better to wait three or four days, keeping the patient separate and quiet, and having regard only to the due performance of the natural functions. By this simple precaution, a furious, vociferous patient, in an apparent state of high excitation, often becomes calm and compliant. By pursuing a contrary course, and prescribing on the first view, remedies, which his condition appears to demand, are given, which subsequent observation proves to be improper, and much injury perhaps is inflicted; thus, a case is rendered intractable and of long duration which might otherwise have speedily recovered.

Success in the treatment of insanity, as in other diseases, is always correspondent with the interval between the attack and the period when remedial care commences. This is fully established by the Comparative Table of Cures.

All maladies, as Celsus has remarked, are easy of cure in proportion to their duration. In no disease is this more forcibly exemplified than in mental derangement. This is the opinion of all the ancients. “*Recens curationem non habet difficilem,*” — “*Circa initia diligentissimè curanda est melancholia,*” are axioms also of Avicenna and Nic. Piso, men of eminence, and of different ages and later schools; and these axioms have been since so fully confirmed by other authors, that I confess I have often felt astonished that the prodigious advantage derived from early attention to cases of insanity has not operated more generally to induce the friends of insane persons to procure immediate advice.

Some have altogether declined seeking the means of cure when there has been a suspicion that the malady was hereditary, conceiving it then to be irremediable. Thomas Willis says, hereditary, like inveterate mad-

ness, is not wholly cured without much caution and difficulty.* This is a positive error. When a predisposition to insanity exists, and symptoms threaten a paroxysm, it may require more care to prevent the explosion, but the malady is not the less difficult to cure; nor are the means to be employed different to those prescribed in acquired insanity. Relapses or recurrences, however, are much more to be apprehended, and must be guarded against with threefold vigilance.

The pathological division of insanity into the different stages which I have described, has, in my opinion, done more to advance the treatment of the malady than even the clinical experience of the ancients, or the morbid discoveries of modern anatomists. This division, in respect to insanity, forms an era in therapeutics. Before, remedies were prescribed at random: one directed bleeding, a second blisters, a third opiates, a fourth purging, a fifth vomiting, and so on; but inquire why? and you rarely received a more satisfactory answer than that these were all remedies for the cure of insanity.

This mode of practice is below empiricism, for that being strictly founded on experience, has a principle to recommend it.

Cælius Aurelianus† and Paulus Ægineta‡ teach us that the precursory physical symptoms both of mania and melancholia, as well as the mode of cure, are nearly the same; except that depletion in the latter must be more moderate, and that local remedies, as well as the moral treatment, must suit the modifications which present themselves in both affections.

If we refer to Thomas Willis, although we shall perceive how much he was imbued with the speculative opinions of his contemporaries on the nature of the

* De Maniâ. . . . † De Melan. Morb. Chron. lib. i. cap. 6.

‡ De Melan. et Insaniâ, lib. iii. cap. 12.

human mind, and physiology generally, yet there are also many very apposite remarks on the remote causes and treatment of this malady.*

So, likewise, in Mead, many excellent practical precepts are met with; but his faith in the effect of lunation upon the mind, gave a bias to public opinion on the causes of insanity, which acted powerfully in diminishing all confidence in human skill. It is to the influence also of these doctrines that we must ascribe the periodical practice of bleeding, vomiting, and purging, which prevailed,† and has only recently been relinquished.

The conviction, however, has at length arrived, that insanity is a purely corporeal disease, and, like other corporeal diseases, is amenable to medical skill.

In every case of insanity there is a diseased action going on, and each demands a separate examination: the features may be there, but be as varied as the expression of the human countenance. Hence none but general principles can be laid down, nor is any systematic treatment admissible.

In describing the characters of insanity I have adverted (p. 275) to that afflicting condition when the sexual feelings appear to be influenced by the morbid action of the intellectual organ, and which is commonly designated, in the male, satyriasis, and in the female, nymphomania.

I have also expressed my conviction, that although it be sometimes evidently a sympathetic affection with cerebral disturbance, yet that it is more frequently a local affection arising from irritation, and that it rarely emanates from moral feeling or genuine physical passion.

If it be a mere sympathetic affection, as in the case referred to (p. 277-8), the mode of treatment therein adopted may be advantageously pursued. If from local

* De Maniâ.

† Parl. Report, 1815 and 1816.

irritation of the genitals from extraneous causes, such as leucorrhœa, prurigo, pediculi, &c., the treatment is obvious; if from determination to those parts, leeches and cooling applications to them, blood-letting if the habit be plethoric, saline purgatives, and abstemious diet, are indicated.

As to that affection denominated erotic monomania, I shall leave the explanation of its source, symptoms, and treatment, to the phrenologists,—avowing that I believe in the experiments and reasoning of M. Desmoulins, which shew that there is no foundation for the opinion promulgated by Gall and others, that the development of the cerebellum bears a relation to the generative faculty,* and that it is the source of sexual desire.†

As the functions of the vascular or nervous system, in all cases of insanity, are disturbed, our skill should be directed, while a prospect of cure is entertained, to diminish

* *Anatomie des Systèmes Nerveux des Animaux à Vertèbres.*

† Experience proves that there is no difficulty in advancing assertions, or lending to arguments the air of facts, when a favourite theory is to be supported. Thus, in advocating the doctrine of erotic monomania, cases of satyriasis are quoted, as if they were as common as those of simple mania; yet I confidently pronounce, that very few of the many zealous phrenologists ever met with a genuine case of it.

I have now been several years solely devoted to the study and treatment of insanity, and I affirm that I never saw a case of satyriasis; yet I suppose, as I have had a fair share of practice, that I must have had many male lunatics under my care with the cerebellum as fully developed as a phrenologist would think necessary to produce the erotic passion in excess. In saying this, I speak advisedly; for I have been consulted by a very large number of medical practitioners, and yet I challenge mention of a single case of satyriasis among all they have sent to me. I do not mean to deny that male lunatics are sometimes libidinous, and often obscene; but that is not satyriasis.

Of nymphomania, I acknowledge I have seen many cases; but the size of the cerebellum had as much influence in exciting the feeling as sexual desire has in producing priapism in men when the cervical portion of the spinal chord sustains an injury.

the action of either system which may preponderate, so as to restore the lost balance.

When the cause evidently exists in a structural or functional lesion of some remote organ, affecting the brain by sympathy, it is obvious that attention must be first directed to the organ so affected.

When we have been made acquainted with the history of a case, and have had time to study and form our judgment on the nature of it, we shall have performed an essential preliminary. That history ought to inform us of the constitution, peculiarities or idiosyncrasies, age, habits, and every moral and physical cause that has occurred capable of intensely exciting or depressing the mind. Reflection will teach us, that the aged and the young, the vigorous and the debilitated, a recent and a long-standing malady of any kind, cannot be treated on the same principle. So especially is it with insanity; but this plain and wholesome maxim is too often forgotten.

In respect to mania and melancholia, the most common forms of insanity, it has been the practice to treat them as distinct affections; but a due consideration of their respective stages (Part II. Comment. V.) will shew, that in the incipient stage of both, the medical treatment can differ but little. It must be obvious, however, that this is the period for prompt measures, and that in the active or confirmed stage, while a chance of cure offers, those measures should not be relaxed, though they must be adapted to suit the various modifications which either form may assume in its progress. The declining or convalescent stage, though requiring great experience and tact, belongs more strictly to moral treatment.

Obnoxious as insanity proves in all its relations to system, so likewise I believe is it in its curative treatment.

The several stages which it pursues in its course, testify that the brain, the organ of the mind, assumes different morbid conditions; first functional and then structural,—functional in the first three stages, structural or organic in the last.

This pathological view must be our guide in prescribing.

In the *incipient stage*, there is evidence of great vascular excitation and cerebral irritation, and this stage must be met by a correspondent treatment. Here are indicated repeated topical abstractions of blood from the head or contiguous to it, shaving the head and refrigeration so long as there is preternatural heat of the scalp, cautious general blood-letting even in the plethoric and robust, very moderate in the delicate though young, purging, vomiting after the vessels of the head are unloaded and the bowels evacuated, nauseating doses of tartarised antimony to moderate the circulation and excessive violence, the digitalis in gradually augmenting doses, till the pulse intimates reducing the dose, saline draughts, and moderate diet.

In the *active or confirmed stage*, the fury and violence of mania, or the despair of melancholia, with their concomitant mental delusions, may persist, yet the symptoms of physical excitation attending the incipient stage subside or intermit, and occasionally only return.

When the symptoms of excitation recur, they must be treated as in the first instance, except that neither depletion by local or general bleeding, nor by any evacuants, should be so active or copious. The system will not in this stage bear them so well; on the contrary, light tonics and the shower-bath are of great use, even when moderate topical bleeding and purging are indicated; and when the exacerbation of a paroxysm ceases, more powerful tonics, as chalybeates, cinchona, cold bathing, and a better diet, are admissible. It should also be observed,

that in melancholia the class of remedies which are designated anti-nervines are useful adjuvants.

In the *convalescent stage*, if symptoms still denote cerebral congestion, gastric irritation or uneasiness, or intestinal irregularities, they should be attended to until they are removed. In this stage, moral treatment besides is especially indicated.

I do not perceive that any particular advantage can accrue from giving specific formula of remedies in particular cases of insanity; for there are scarcely any two for which the same formula or dose would be suitable. Doses, like the remedies themselves, must be modified according to the constitution and peculiarities of the patient, and symptoms of the case.

It may be important to remark, that cases of evident derangement of the intellectual faculties are sometimes met with, which, perhaps, on a very rigid examination, present no symptoms of corporeal disorder. All the functions seem regular, and there is no alteration in the external appearance, except, perhaps, a little more vivacity in the look, and a slight peculiarity in the eyes. These are persons in whom, invariably, the hereditary predisposition is inherent. Moral perhaps rather than medical remedies in such cases appear to be indicated. Nevertheless, remedies which diminish inordinate cerebral action, provided they be not violent, will be found useful, and will often prevent a positive paroxysm of mania.

Presuming that no one will attempt the cure of a malady attended with such difficulties as insanity, without a previous knowledge of pathology and the practice of medicine, I shall proceed to comment on the different remedies recommended, interspersed with practical remarks on their application and effects.

Of the treatment of delirium specifically, little can be said. Where it assumes the form of a distinct affection, as in *delirium tremens*, I have described the treatment.

It is obvious, that we must first endeavour to ascertain whether it be idiopathic, as in acute cerebral inflammation; or symptomatic, as in ordinary fevers; or sympathetic, from narcotics or other noxious ingesta, intestinal worms, wounds, &c.; or from a remote diseased organ or texture; or from metastasis. In any of these cases, remedies must be applied to the cause, since the delirium is but the effect, and will generally cease when the cause is removed.

Such remedies as are commonly in use I shall discuss in the following order:—

1. *Abstractions of Blood*; 2. *Dry Cupping*; 3. *Refrigeration*; 4. *Gyration and Swinging*; 5. *Sleep*; 6. *Narcotics*; 7. *Blistering*; 8. *Setons and Issues*; 9. *Artificial Eruptions*; 10. *Bathing*; 11. *Purging*; 12. *Vomiting*; 13. *Nausea*; 14. *Salivation*; 15. *Digitalis*; 16. *Camphor*; 17. *Turpentine*; 18. *Tonics*; 19. *Tobacco*; 20. *Diet*.

COMMENTARY III.

1. ABSTRACTIONS OF BLOOD.

General Blood-letting.

COPIOUS abstractions of blood are almost universally adopted in cases of insanity attended with symptoms of violence, and sometimes where the patient is tranquil. The practice has received the sanction of ancient authority, and is at present very universal. Many of eminent character among the moderns, however, have doubted its efficacy; and experience has convinced me, that, except in a very restricted sense, it is a practice fraught generally with mischief.

Following example rather than experience, I tried depletion by blood-letting for several years; but discovering my error, I became more cautious; and, I believe, that I have scarcely ordered venesection in six cases of simple mania or melancholia in as many years. My conclusion is, that since I changed my practice more have recovered, and certainly the cases have been less tedious and intractable.

I have premised that three disordered conditions in the circulating system exist in mental derangement. 1st, There may be too great a quantity of blood flowing to the brain at the expense of other parts, which suffer a diminution of it, thus producing a real determination. 2d, There may be an excessive momentum in the vascular system, indicative rather of morbid action than of excess in quantity. And, 3rd, there may be a deficiency in quantity, by which sufficient blood is not propelled to the brain, to give the intellectual organs their wonted energy. I may add, that mania, like gout, may be occa-

sioned by a spontaneous effort to relieve general plethora, or to rectify a defective balance in the circulation.

Now it must be evident, that large abstractions of blood from the system in any of the three first conditions can never correct the error in the circulation.

In the young, or the gross and plethoric, the determination to the brain in mania may be so strong as to threaten sanguineous apoplexy. In this case, prompt and copious general depletion may save the patient's life. It may also, by producing syncope or mere exhaustion, procure quiescence, but it will not cure mania. The danger, however, of sanguineous apoplexy in mania is, as we have proved, less to be apprehended than, from the reported number of sudden deaths, has been hitherto inferred.

If any urgent necessity impels copious abstraction of blood in mania or melancholia, the more prudent practice is to effect the object with the greatest celerity.

Formerly, the practice was to abstract blood when the head was to be relieved, by a puncture in the frontal, nasal, or orbicular veins, or in the *venæ raninæ* under the tongue. The latter mode I have known practised in a case of insanity, where those veins were so distended as to hinder the flexible movements of the tongue, and protrude the point of it between the teeth. The relief of the engorgement was immediate. But Cælius Aurelianus, in whose time this operation was much resorted to, condemns it as a superstitious practice, founded on false principles, and, besides, objects to it from the difficulty of checking the flow of blood.* For the same reason, it has been disapproved by the moderns. Bleeding from the feet or ankles has been a favourite remedy, with a view to derive blood from the head. But all these modes are very precarious in their effects, and should be abandoned for more direct means of detracting blood from the seat of mental disturbance, whenever such evacuation is deemed absolute.

* Lib. i. cap. xii.

Arteriotomy is often then the readiest and best course ; and to divide either branch of the external carotid passing before or behind the ear, is more advantageous than dividing that of the temple. Bleeding from the jugular vein by a free orifice is seldom practicable, from the turbulence or position of the patient, or perhaps from obesity ; and as the discharge by this mode is from the integuments of the head, and not immediately from the brain itself, it is less efficacious. If syncope be desired, the sooner it follows the less will be the deduction of blood and of the *vis vitæ*—two objects always to be cherished in the treatment of insanity. Hence, the making of one large, or even two, orifices, or bleeding from both arms at once, if it can be managed, has been advised.

It is only where a real state of plethora exists, or apoplexy is pending, that general blood-letting in mental derangement can, in my opinion, be justified.

Simple determination of blood by too great momentum, producing that state of congestion of the brain which originates cerebral irritation, and perhaps the maniacal action, is not relieved by venesection. Neither can that mode of abstraction of blood ever be admitted in the cachectic state, since that implies a deficiency of the vital fluid, and debility.

In all cases of insanity, as in other diseases, the force of the heart's action, and the quantity of the circulating fluid, is apt to be judged by the pulse at the radial artery. Yet, experienced practitioners are fully aware of the uncertainty of this index in most complaints ; but in no malady that affects the human body is the fallibility of this criterion so conspicuous as in insanity. Drs. Cox, Parry, Mayo, and others, attest the disproportion between the stroke of the carotid and radial pulse in cases of insanity. The former may be strong and vibrating, while the latter is frequent, small, and oppressed.

I have before given some cautions against deciding on

the propriety of bleeding from the state of the radial pulse in this disease ; but some justify the practice from the febrile, or inflammatory, action said to be always evident in furious mania. Without reference to all the best authorities which testify that mania is a state *sine febre*, where are the proofs of febrile or inflammatory action ? Simple increased vascular action, or augmented heat of the surface, is no proof of the former ; for in incipient mania, an accelerated pulse, even with throbbing of the temples, is a concomitant of the attack ; and should increased heat attend, it will be commonly found to arise from the degree of muscular violence the patient has exerted : the heat is not that of pyrexia ; the skin is generally in a sweat, not hot and dry.

Where are the proofs of inflammatory action ? We see there is no pyrexia. If blood be drawn, it exhibits not the usual indication of inflammation. Crowther remarks, that it does not present a sizy appearance.* Haslam reports, that of more than two hundred maniacal patients who were let blood by venesection, there were only six whose blood could be termed sizy, and that it is only in the extremely furious and ungovernable to be seen. Now, Hunter says, that violent mental emotions, and also excessive exertion, will alter the properties of the blood ;† and it is well known, that blood abstracted from women in labour, or from persons after great bodily exertions, will shew a buffy coat. Therefore, in the six of the two hundred whose blood offered this phenomenon, it was probably the effect of violent mental emotion, or of excessive muscular exertion. The results of anatomical investigations do not support the theory of cerebral inflammation in mania.

I conclude, therefore, that venesection cannot be justified in any case of pure insanity, whether upon the

* Pract. Remarks on Insanity, p. 102. † On the Blood, p. 26.

principle of febrile or inflammatory action accompanying it, or of local determination.

Those writers who believe in febrile and inflammatory action in the early stages both of mania and melancholia, do not all advise general blood-letting, or that it must be with great caution;* others object both to general and topical bleeding, although admitting febrile action;† and others, again, consider it in the strong and plethoric highly beneficial, without reference to the existence of either fever or inflammation.

I own that I regret the sweeping condemnation both of the lancet and cupping in mental derangement which Dr. F. Willis inculcates; because it is possible that the one may be required, and I am sure that the other, or leeching, can seldom be dispensed with in any recent case.

When the only advantage professed to be gained by the operation of phlebotomy in the treatment of insanity is the reduction of violence, and a consequent state of quiescence, no body can be more opposed to depletion of blood than myself. We should always first inquire of ourselves whether quiescence cannot be obtained by any other means; and next, whether consequences may not follow the practice of depletion which these present advantages can never compensate.

Ferriar and others have remarked how suddenly the strength of lunatics gives way on general bleeding: my experience confirms this fact. Unhappily, mere raving madness, which always requires support and nourishment, is often mistaken for the furious delirium of physical excitation, which admits of depletion; hence, frequently, the sudden prostration in lunatics after general bleeding. But the same effect most unaccountably often follows where the symptoms seem to justify bleeding.

* Hallaran's Observ. &c.

† Dr. F. Willis on Mental Derangement, p. 91.

We may judge of the extent to which this practice has been carried in the treatment of mania, when we are told by Plater that he bled once a week, and had done so in a case for seventy successive weeks.* Even this is not so barbarous as the routine and indiscriminate blood-letting at certain seasons formerly practised.

I conclude, therefore, that blood-letting ought not to be decided upon, except upon a most mature consideration of the constitution of the patient, and all the symptoms of the case.

There are some conditions of the insane where blood neither generally nor topically can be abstracted without a decided and immediate ill effect. It is never admissible in long-standing insanity, except a *temporary* attack has come on, with symptoms of active cerebral excitement. I do not allude to those periodical or intermitting paroxysms which sometimes attend; for there, blood-letting is certainly not indicated. In chronic demency or fatuity, of course it is out of the question; so, likewise, in every form of insanity consequent on any extenuating disease, such as that, for instance, which Sydenham describes as the sequel of intermittents, and where blood-letting always produced incurable fatuity. Sims mentions even a species of phrenitis in which bleeding so reduced the strength, that death occurred in an hour after.†

Topical Bleeding.

The sudden diminution of vital energy frequently attendant on depletion of blood from the general system, can never be experienced in topical bleeding, except from some gross misconception or misapplication. Blood detracted by leeches, or cupping, will sometimes occasion faintness; but I never saw either, except when an ex-

* Observ. lib. i. p. 86.

† Sims on Epidemics.

cessive quantity has been unadvisedly or accidentally lost, produce any permanent bad effect, even though faintness have followed.

The primary symptoms in the commencement of insanity, whether mania or melancholia, denote increased vascular action or congestion of the vessels of the brain. The partial pains, tension, or throbbing in the head; extraordinary heat of the scalp, flushed face, blood-shot or glistening eyes, and general confusion of ideas, mark cerebral determination or congestion. It is true, there may also accompany these signs a white tongue and a very accelerated pulse; but neither of these in cases of insanity can be accepted as unequivocal proofs of general excitement: the white tongue is a common accompaniment of derangement of the alimentary canal, which usually attends insanity; and the pulse, which is influenced through the nervous system, will often be found amazingly rapid in cases of mental derangement where there is none of these symptoms of cerebral excitation.

From this view of the state of the intellectual organ in mental derangement, it may be inferred, that although venesection is not indicated, yet, that topical or local bleeding may be very useful.

In every case of recent insanity which I have seen, and I do not recollect an exception, local abstraction of blood from the head itself, or contiguous, as the nape of the neck, or between the shoulders, has been indicated. The mode has been by cupping or by leeches. Cupping on the occiput is to be preferred. Celsus says, this lessens the malady and brings on sleep.* Sometimes the terror or prejudice against this operation is so very great that it cannot be performed with propriety; then leeches are the best substitute. Neither of these modes of abstracting blood weaken like general bleeding;

* Lib. iii. cap. 16.

for this reason, if for no other, they are preferable. Shaving the scalp is generally to be premised in the treatment of all recent attacks. Besides keeping the head cooler, it affords greater facility to the applying of cupping-glasses, or leeches, to such part of the cranium as may be requisite. If the patient describe a precise spot where pain or throbbing is felt, the glasses or leeches will afford much relief by being applied over it. If no particular part is referred to, I order them to be applied behind the ears, or across the occiput, and sometimes on the temples.

The quantity of blood to be taken away must be regulated by circumstances; the plethoric and the cachectic, the strong and the weak, difference of sex, constitutional varieties, the highly and the moderately excited, all demand consideration, and require different measures. One case may require the loss of sixteen or twenty; another only ten, eight, or six ounces of blood, or even a smaller quantity.

Hallaran says, that the superficial heat is reduced by placing leeches behind each ear on a limited space, and afterwards by cupping-glasses applied over the orifices. Where more blood than the leeches take is wanted, this is a good mode. As, however, local determinations of blood either to the head or other parts do not depend upon fullness of the sanguiferous system, but may equally occur in the extenuated, so likewise may topical bleeding be called for in the one as well as in the other case, though of course in quantities relative to those respective conditions.

In the case detailed,* perhaps depletion by cupping was prescribed where the patient was so extenuated and debilitated by continued disease that many would have deemed it imprudent. Nevertheless, it was successful, and is a good example how far the operation is admissible.

* See *Narcotics*.

It is an excellent rule to observe in local abstractions of blood, that as many glasses or leeches should be applied at once, if possible, as are capable of abstracting as much blood as may be desired. The effect will be more certain, and the length of the operation be curtailed, which is an object of no small importance with impetuous and unruly patients.

Among those who admit the utility of local abstractions of blood from the head, or contiguous to it, in this malady, there is much diversity of opinion as to the propriety of its repetition, or if repeated, how long the practice should be pursued.

Some conceive that the object is attained by a single emptying of the surcharged vessels of the brain; others repeat it through exacerbation and remission, even into the continuous form. The latter course I hold to be dangerous, as likely to produce a permanent state of collapse of the brain. My practice is to repeat cupping or leeches so long as symptoms of great cerebral excitation prevail, especially while a preternatural heat of the scalp is felt; but when they remit, to desist from drawing away blood, and repeat it only with the renewal of these symptoms. If premonitory symptoms announce an attack, local depletion will often prevent it. Mere raving and fury must not be mistaken for cerebral excitation consequent on vascular excitement. They are probably the effect of that cerebral irritation which is produced by an opposite condition of the brain, and would inevitably be exasperated by any kind of depletion.

Patients are often so sensible of the relief of topical bleeding, that they will frequently solicit it as a boon.

When insanity has been relieved, and sometimes cured, by spontaneous hæmorrhages from the nose, uterine and hæmorrhoidal vessels, or varicose veins, I question whether such an effect may not have been produced more by change of determination than by the sanguineous

evacuation. It is certain that the degree of mental anguish and disturbance which impels suicide, finds relief in the sudden loss of blood.

In cases of nymphomania, all the distressing symptoms whence this affection derives its name have been removed by the application of leeches to the vulva. In like manner, improvement of the mental faculties, dependant on menstrual obstruction, follows cupping on the sacrum. Sympathetic delirium from an affection of the liver, has subsided by local abstraction of blood from the hepatic region.

Local determination and congestion of the brain in mania, with other symptoms of excitation, may take place without flushing of the face. On the contrary, in mania, as well as sometimes in the apoplectic diathesis, a singular palor exists. Nay, cases occur where topical blood-letting has been required to relieve local congestion, and at the same time stimulants to support the general tone of the system. I have no hesitation in continuing abstractions of blood from the cerebral vessels by cupping or leeches, so often as the symptoms denote fresh excitation. It is advisable to pursue this plan even when tonics are indicated to support the patient's strength; for local determination is as frequent in the weak as in the strong. Of course, the quantity of blood detracted in such cases will be smaller. Should faintness or marks of exhaustion come on during the abstraction, the patient must be supported by good broths or a little wine.

The melancholic certainly hold life by a more precarious tenure than the maniacal. It is the natural effect of depressing passions. But in the commencement of melancholia, accompanied by uniform despondency, the symptoms of determination, or of congestion of the cerebral vessels, are as manifest often as in incipient mania. Sometimes, on the explosion taking place in melancholia, it is attended with great fury and excitation. Whether,

however, accompanied by despondency or excitation, topical bleeding may be equally necessary and beneficial; and as the symptoms in this form of insanity persevere longer without remission, moderate local depletion may be repeated for a greater length of time than in an attack of mania. The ancients advised blood-letting in melancholia; and Willis says, “Sanguinis emissio in omni ferè melancholiâ locum habet, et nonnunquam sæpiùs iteranda est.” He advises bleeding from the *vena salvatella*; adopting probably the popular opinion, that bleeding from this vessel was particularly useful in melancholy. It is the fact, however, which I wish to record, not the vessel whence the blood was taken; since many are afraid to detract blood in any way from a patient in melancholia. There is nothing in such practice inconsistent with the received pathology of insanity, since more authorities support the pretension of melancholia to be the original disease, of which mania is but a variety.

The practice so frequent on the continent of applying leeches to the anus, is founded, I conceive, on the obsolete doctrine of revulsion, and as a general principle should be declined. But where insanity may be reasonably suspected to arise from sympathy with some abdominal viscus morbidly affected, the loss of blood from that part may do good; and more especially if the patient has been accustomed to hæmorrhoidal flux, and that has been suppressed.

2. *Dry Cupping.*

A few observations on this mode of operating may be here applicable as a corollary to the preceding. It is very desirable and useful in cases of insanity and transient delirium, where we have reason to suspect determination to the brain or congestion, to relieve the surcharged vessels; but the patient may be in such a state

of emaciation and debility as to positively forbid the detracting of blood even in the smallest quantity. I have seen such cases ; and have found sensible advantage, after shaving the scalp, from the repeated application of several glasses to the head, without scarification or loss of any blood. The blood is by this means derived from the surcharged internal vessels to those of the external, all of which will be seen greatly distended from the operation ; and it is there retained awhile, without being absolutely withdrawn from the circulation, to the relief of the brain.

If a patient die soon after blood has been abstracted from the scalp by the usual process of cupping, and the head be immediately opened, all the exterior and interior anastomosing blood-vessels of the pericranium and the investing cerebral membranes, inclusive of those of the brain itself, will be found highly injected and distended with blood, to a circumference exactly correspondent with that of each glass which is applied on the surface. This appearance I saw remarkably displayed in the head of a patient who died in half an hour after he was bled by cupping, and whose head I examined six hours after he died. But where the examination takes place many hours after the operation, the internal evidence of this effect of cupping is nearly obliterated. This fact demonstrates the possibility of affording relief by simply attracting blood to the surface by the mere application of the glasses.

Friction on the pericranium after dry-cupping, and pediluvium, greatly tend to determine blood from the head to the general circulation.

3. *Refrigeration.*

The utility of refrigeration where there exists a preternatural heat of the head, is confessed in all cases of cerebral disorder.

Divesting the scalp of all the hair by shaving, is not

only a necessary preliminary to other applications, but deserves regard and adoption as in itself a refrigerating process. It is certain, that the simple denuding of the scalp produces a calming and even soporific effect, in violent mania.

Celsus sometimes advised clipping off the hair, sometimes shaving the head. In all diseases where the sensorium is affected, whether attended by pyrexia or without, the latter is an admirable auxiliary. Clipping the hair close does not suffice; for, besides that it does not produce the soothing effect of denuding, the process of evaporation, which abstracts caloric, never goes on so rapidly as when a naked surface like the shaven scalp presents itself; neither is the impression on the sensorium, the object desired by the operation; so effective. The abstraction of heat is much more rapid and complete by evaporation than by cold applications, such as ice, or any of the frigorific mixtures.

The head, when divested of the hair, should be kept so as long as symptoms of active cerebral excitation are manifested, and local applications to the surface are deemed necessary. When such symptoms subside, and the brain may be suspected to be in a state of collapse, refrigeration must cease, and the hair may be suffered to grow.

As a general rule, I recommend that the heads of all insane persons should be kept cool. For this reason, permitting them to have their heads covered when indoors is an injurious custom. In several public asylums I have visited, I observed this bad habit prevail, when, at the same time, the patients were crowded in apartments much too heated. This is very inconsiderate, and will produce in many cerebral excitement and sleepless nights, and consequent irritation to all the patients.

Insane persons disposed to determination to the head, should lie with their heads cool, and also raised. The blood may be invited to the head in adults, as it often

is in children, by reposing it on a substance like feathers, which always generate a preternatural degree of heat. Convulsions in infancy, especially during dentition, are induced by this custom, and the intellectual organs are consequently so much impaired, that idiocy or chronic epilepsy succeeds. This also may encourage a predisposition to insanity.

I have elsewhere remarked the sensible gratification afforded to the insane by the application of cold in any form to the head, whether from a draught of air, a pouring rain, or any other means.

In all cephalic affections, its utility has been acknowledged: "*Si calor, aquâ frigidâ multâ perfundere caput expedit.*" Again, — "*Prodest caput radere, idque perfundere aquâ frigidâ, vel aliis refrigerantibus;*" and in various other places Celsus acknowledges the power of shaving the head, and cold water applied to it and the body, to relieve pain, fever, or delirium. So likewise our English Celsus, Sydenham, remarks, that to remove the watchfulness succeeding a state of fever, cold applied to the head does more good than any opiate.*

The animal system possesses a wonderful power of generating heat, and this may be carried to excess generally or locally: in the one, this power is exhibited in the form of fever; in the other, in local inflammations, or simple increased heat without suffusion on the surface. The power of cold on the balance of the circulation is conspicuous in its sedative effect on the healthy body, or when applied to counteract great determination to the head or cerebral excitement, and by its opposite effect when applied to the extremities: cold to the head induces sleep; to the feet, headach, pervigilium, and excessive impulse of blood to the brain.

In cephalitis, cold applied to the head is a powerful remedy.

* Sect. i. cap. 4.

In synochus, also, quiet and sleep are induced by affusion of cold water on the surface of the body. But it has been remarked, that these effects are rarely produced by it till the inordinate excitation has been subdued by previous evacuants, local or general, as the case may have required. A contrary effect is commonly the result, unless the patient has been thus prepared.

So, likewise, when cold is applied to the scalp, in cases of insanity with symptoms of great cerebral excitation, though the feeling of it may be agreeable, yet the effect is neither so complete nor so permanent as when topical bleeding and purging have preceded. Disappointment of the expected effect will attend the omission of these precursory evacuations.

We find the soporific effect of cold to the head illustrated by ancient customs.

The natives of a part of India have two curious, and probably primitive, modes of lulling young children to sleep. The first is by the operation of a constant stream of cold water pouring on the crown of their heads. The parents wrap up the bodies and feet of the children warm in a blanket, and place them horizontally in trays, they then expose the vertex of the head only to the cooling influence of a running stream, and thus certainly induce repose.* To the second mode, I shall refer presently.

The application of intense cold to the head in a chronic state of insanity, when the patient is noisy and violent, never induces quiescence and sleep. On the contrary, the brain being in a state of atony, cold then always becomes a source of irritation.

Dr. Busser, of Wohlau, relates the case of a lady, attacked with mania on the seventh day after delivery, and who was cured by the application of ice in a bladder

* Frazer's Tour in the Himalāya Mountains, p. 105.

to the shaven head, for six or eight minutes, several times a day. But in the case of a man who had been upwards of six months in a state of mania, where it was tried twice a day for half an hour, and continued for eight days, it produced loss of sleep, which he had previously obtained by the use of belladonna. A remark on this practice is made by Dr. Newbek, with which I entirely accord: he imagines it is in cases of turgescence of the blood-vessels of the brain, and at the commencement of the attack only, that benefit is derived from the application of ice, and the use of antiphlogistic means in general.*

One caution is here very necessary, which is, that cold applications to the head should be continued no longer than the preternatural heat of the scalp lasts.

Georget says, that cold applications to the head ought not to be employed during the period of excitation. In this, as it may be seen, I totally differ from him, provided the cautions and preparations which I have prescribed are fully observed, in respect to previously unloading the cerebral vessels by topical bleeding, and the bowels by evacuants.

It is immaterial what means are applied to refrigerate: the mode by evaporation produces the most intense cold. Ether dropped on the shaven crown, and alcohol diluted, are used by some; the former, however, is troublesome and very expensive; the latter answers extremely well. I prescribe a lotion consisting of one-fourth alcohol and three-fourths of camphorated mixture;† or spirits, vinegar, and water, of equal parts; or with liquor ammoniæ acetatis, instead of vinegar. But the

* Quart. Journ. of Foreign Med. and Surg. No. I. p. 100.

† Care should be taken that the spirit be not brandy or gin, unless it be mixed with some fluid not as palatable. When pure alcohol has been mixed with plain water, rose or elder-flower water, &c., I have known the attendants drink it.

refrigerating mixtures of the London Dispensatory, also, are useful. A napkin folded several times, and put over and round the head, well saturated with any of these lotions, and wetted again as often as it becomes dry, is the way of keeping the head cool. Ice pounded and applied in a bladder is good; or even a clay cap, often renewed, where expense is an object, is not a bad substitute. The surface may be kept cool also by sponging the head with a tepid mixture of vinegar and water.

Of the douche, or descent of a column of water from a height on the head, I know nothing from personal experience. The cold douche is represented to act sometimes as a sedative, sometimes as a tonic. But this remedy seems declining in reputation, as often injurious. Even in France, the once favourite douche is at present much reprobated. It is now used only with the greatest caution; and more as a means of repression and moral agent in furious cases, than with an expectation of procuring sleep or giving tone.* Death followed the abuse of it in one case at Charenton; and other serious accidents have happened. Disorganisation of the brain and incurability have followed the submitting of patients to the operation for an hour together, as was formerly practised.

Still the douche, when used with judgment, is a remedy of importance.

4. *Gyration and Swinging.*

Each of the three preceding remedies, by diminishing cerebral excitation, induces sleep in recent insanity, and hence greatly contributes to the cure of the malady.

Any remedy that invites sleep acts more beneficially on the disturbed functions of the brain than narcotics of any kind, though producing that effect.

* Georget, pp. 324—327.

One of the means recommended by Celsus* and Aurelianus† in mania, is motion in a suspended bed or movable seat, or by swinging.

The latter also speaks of the effect of the motion of a rotatory vehicle which produced vertigo and dimness, for the cure of epileptics.‡

Darwin advised gyration to procure sleep. He took the hint from the account of a man who extended himself across a large mill-stone while gently whirling round, and found that it lulled him to sleep before it acquired its full velocity. Hence, also, he inferred that death without pain might have been induced by an increase and continuation of this motion.

Probably the man alluded to by Darwin arrived at the knowledge of this effect from gyration by mere accident.

This appears also to be another common mode, among the aboriginal inhabitants of the Himālāya mountains, of obtaining rest. When the mother wishes her infant to go to sleep, she takes it by an arm, and, aided by her knees, gives it a violent whirling motion, till, in a few moments, sound sleep is the unerring result.§

The effect of sea-sickness on the circulation and stomach is somewhat analogous to the action of the rotatory machine, and had been in olden times prescribed in cases of insanity.

From the influence of gyration and swinging also on the circulation, by producing vertigo and diminishing the velocity of the pulse, the late Dr. Carmichael Smyth recommended the latter in pulmonary consumption.|| It considerably lessens, likewise, the temperature of the surface of the body.

Darwin conceived that two objects were attained by the horizontal whirling bed ; first, the quieting of the violent

* Lib. iii. cap. 18.

† Lib. i. cap. 5.

‡ De Epilepsiâ.

§ Frazer's Tour, ut suprâ cit.

|| On the Effect of Swinging, &c. 1787.

action of the heart and arteries by gently compressing the brain, and that to accomplish this, the patient's head was to be distant from the centre of motion ; and secondly, the forcing of the blood from the brain into the other circulating vessels, and this was to be done by reversing the position of the patient, and placing his head next the centre of motion.*

Upon this theory, Darwin constructed a rotatory machine ; but the late Dr. Joseph Mason Cox was the first who introduced it in the treatment of insanity. He prescribed the oscillatory as well as the circulating movement.

Dr. Hallaran very soon afterwards, on Cox's recommendation, adopted both modes in the Cork Lunatic Asylum ; and these physicians, in their several publications, speak most confidently of its utility. The latter has given in his publication a graphic sketch of both apparatus, which he considers to be improvements on Cox's.† The rotatory seat for the erect position is certainly better than a common Windsor chair ; inasmuch as it supports the cervical column better, and guards against the possibility of the head in the vertiginous state from hanging over the side.

It is described as seldom failing to produce copious evacuations in the most obstinate cases, provided that, on increasing the velocity of the swing, the motion be suddenly reversed every six or eight minutes, pausing occasionally, and stopping its circulation suddenly : the consequence is, an instant discharge of the contents of the stomach, bowels, and bladder, in quick succession. Should the stomach only be acted upon, a purge should be afterwards given.

The erect machine is the best for procuring evacuations and producing moral repression, and the horizontal

* *Zoonomia*, vol. ii. p. 608.

† *Pract. Observations on Insanity*, 1818.

circular bed for inducing sleep. Clear evacuation of the bowels should precede the use of either; nor should they be used at the commencement of the disease until the violence of the paroxysm has subsided; nor in young plethoric persons, nor where there is a positive determination of blood to the head. Another caution is, to begin the motions gradually, till they are carried to the degree of velocity desired.

In the intermitting form of insanity, gyration has been found of particular benefit in checking the approaching paroxysm. When a great prostration of strength suddenly succeeds to the full motion of the swing, most advantage is expected. Its effect in lowering the circulation and temperature of the body is so immediate, that alarm for the consequences is generally created in those not accustomed to the use of it.

Where sleep is the wished-for object, a slow and long-continued action of the swing, if possible, without affecting the stomach to vomiting, is to be kept up.

Like every other antimaniacal remedy yet prescribed, it is acknowledged that this sometimes entirely fails in producing the desired effect. Possibly, as it always occasions great apprehensions, its ordinary operations on the system are thereby counteracted.

The operation of gyration, either vertically or horizontally, is strongly advised, as a moral as well as a medical agent in chronic cases; for where no expectation of cure has been entertained, a few trials have produced a wonderful improvement in manners and behaviour.

Where the degree of violence has been so great as to compel a rigid confinement, the patient has become tractable, and even kind and gentle, from its operation. The morbid association of ideas has been interrupted, and even the spell of the monomaniac's cherished delusion broken.

I remember, in the case I have mentioned (p. 293),

seeing in the Military Asylum at Rochester, a marked instance of the good effects of the rotatory chair. It completely broke the catenation of morbid ideas; and the dread of being exposed to it again, made the patient alive to every thing around him.

Dr. Hallaran remarks, that patients of this description “previously to any amendment, were invariably affected from the disturbance occasioned by the machine, with a smart fever of eight or ten days’ duration, and from which the favourable occurrence here alluded to seems to have arisen;” but that he never saw any one instance, when the disease had assumed the chronic and uninterrupted form, of complete recovery having followed its use.

The works both of Drs. Cox and Hallaran contain many important observations on the application and effects of this powerful engine in the treatment of insanity, and to them I would refer the readers for more minute details.

The rotatory machine is met with now in most British public asylums; but its results are very differently reported;—some speaking most favourably of it, some dubiously; and with others it has fallen into disuse.

Without wishing to extol its merit more than is due, this diversity of opinion cannot be the fault of the remedy: it is reasonable to suppose, that the same degree of attention in selecting the cases to try it on, and the rules prescribed for applying it, have not been equally observed in different institutions; and hence these contradictions.

Professor Horn* adopted the rotatory machine in the Royal Institution of La Charité, at Berlin, in 1806, on

* Insanity, especially that form complicated with epilepsy, is treated with great success in La Charité, at Berlin. Dr. Horn, in corresponding with me respecting the means he used in that excellent institution, obligingly transmitted a dissertation, entitled, *Nonnulla de quibusdam Remediis ad Animi Morbos Curandos summo cum Fructu adhibendis. Beralini*, 1817; *Auctor*, JOHANNES SANDTMANN. This opuscle, he

the report of Dr. Cox, and tried its effects with great zeal and perseverance, on an extensive scale. His conclusions were decidedly in favour of it. He describes its effects pretty nearly in the same terms as our English authors. Horn also coincides with them in enjoining that this powerful remedy should never be applied without great caution, and by experienced persons; because, in injudicious hands, it is calculated to do much mischief. Unfortunately, notwithstanding his cautions, a fatal accident occurred to one of his patients from its use, and it created so great a popular clamour against this eminent physician, that he was obliged to retire from La Charité.* The government of Milan have entirely suppressed the use of the rotatory machine in the hospital of Senavra, from several fatal accidents attending it.

I profess no personal experience in the operation of this remedy; but from the inductions of pathology and analogy, I am induced to believe, that under proper regulations, it deserves the high character given of it, and that no lunatic asylum where the cure of insanity is professed, should be without a complete apparatus of both kinds.†

It is unquestionably a formidable remedy, and on no

advised me, contained an accurate epitome of his views and practice in insanity. It may be said to be also an epitome of modern pathology and therapeutics in relation to this malady.

* My friend, Sir Alex. Crichton, mentioned this lamented circumstance to me. I know nothing of the particulars of the case.

† It may be fairly inquired, if I entertain so favourable an opinion of the effects of the rotatory machine in the treatment of insanity, why I have not introduced the use of it in my own establishment? To this I would candidly reply, that, convinced by the experience and reasoning of Cox, Hallaran, and Horn, I actually meditated the use of it; but before I adopted it, I wrote to each of these respected physicians for more particular information as to the construction, application, and effects of the machine. I received such answers, accompanied with accurate drawings, from Drs. Cox and Hallaran, as determined me to construct one; but

account ought to be tried but under the superintendence of a competent judge. I have met with no reasonable argument against it, but the abuse of it. Were we to be guided by such an objection, the healing art would be stripped of its most valuable and efficacious remedies, and the *materia medica* be reduced to a *caput mortuum*.

We must be prepared, however, to expect that when this ultra remedy has been tried and fails, the malady is too firmly rooted to be moved.

5. *Sleep.*

Most medical practitioners consider sleep to be almost a specific in insanity, and therefore are anxious at all hazards to procure it. Often, however, when obtained, it disappoints their expectations.

It will be remarked, that the tendency of all the remedies of which I have treated, such as topical bleeding, shaving the scalp, refrigeration, friction, and gyration, is to induce sleep. The consideration, therefore, that I shall here give to sleep is—as a remedy in mental disorders.

Too much sleep disposes to all the disorders of a slow circulation and to weakness and cachexy. In

I was deterred from the execution by the deep impression made on the public mind by the Parliamentary Inquiry into the State of Madhouses and Lunatics in the years 1815 and 1816. A universal disgust at the shocking scenes there exposed was naturally excited. The evil in relation to the good which has resulted from that investigation is certainly not to be compared. Yet this disadvantage has arisen: almost all confidence in those who have devoted themselves to the medical treatment of insanity, as well as in those who simply undertake the care of the insane, was destroyed. However exalted by professional or moral character, so morbidly sensitive is popular opinion on the subject of insanity, that no medical man dares follow the dictates of his better judgment. Were he to adopt a practice, from the energy of which an accident happened; or were he to try any experiment, however hopeless the case, and the result be contrary to his well-founded expectations,

affections of the head generally, sleep does not alleviate; and it is possible that an abridgment of it in those afflicted with cerebral affections, might even prove beneficial. However that may be, I am quite clear, that there is commonly by far too great a solicitude to procure sleep in mental derangement.

Sleep, Lower says, is induced by the gentle flow of blood to the brain, and departs when the circulation in that organ is accelerated. It is a periodical suspension

that man would be universally decried, his reputation be blasted, and his family ruined.

In every other disease, in surgery, in midwifery, when the occasion demands it, the most hazardous practice or operation is attempted. If it do not succeed, and life is the forfeit, no blame attaches. If it do succeed, the physician or the operator is a deity.

Till a more liberal feeling prevails, and the public learns to discriminate between those who make the study and treatment of insanity their profession, and those who make a trade of insanity, an insuperable bar will exist to improvement in the treatment of the disease from any experimental course of inquiry. A physician may be equally disposed by the precepts of philanthropy as by those of philosophy to advance our knowledge in the cure of this afflicting malady; but he will find it difficult to obtain credit for such honourable and legitimate motives.

In public asylums, where the practice is pursued under the sanction of superior authority, a misadventure may not be attended with such serious consequences to the physician; but the conviction I have expressed has deterred me, and doubtless many other medical men in private practice, from introducing the rotatory machine, or any hazardous expedient in the cure of insanity.

In proof of the extent to which this prejudice is carried, it may be remarked, that a casual notice of the benefits derived from the rotatory machine in cases of insanity in the hospital of Berlin, which appeared in *The Times* of Aug. 17, 1827, produced next day a letter, falsely stating that the most disastrous consequences had followed from the use of it in this country, and comparing it to an instrument of the Inquisition for the purpose of torture! This anonymous writer, in ignorance of facts, and adopting the morbid sensitiveness of modern pseudo-philanthropy, talks of "a mind diseased," and instructs us that patient endurance and kindness of heart are the only effectual remedies for insanity!—B.

of the powers of the brain. When sound, the sensorial and muscular powers are completely suspended; but in unquiet sleep, the memory is partially exercised, and various senses and passions are moved. The effect of the former is to refresh and recruit the powers of the brain and whole nervous system, and also of the muscles. Hence insane people, the more sound they sleep, when they awake have all their hallucinations more vivid, and resume all their violence.

A cessation from noise and violence seems the chief desideratum in those who are about insane people; but the medical attendant should remember, that if the means used to obtain sleep be not indicated by the physical state of the patient, mischief follows its exhibition. A maniac awoke from sleep artificially obtained, is a giant refreshed. New activity is imparted to the sensorium, and his muscular powers are recruited. If he have lost by it one hallucination, another assumes its place, more wild, perhaps, and extravagant than the former, and his waking dreams are the more vivid; hence his violence and raving are increased, and the power of continuing them prolonged.

There are, as we have seen, very opposite conditions of the brain in mental derangement. In the incipient and invasive stages there is too much excitement and activity; in the confirmed and incurable too little, though sometimes great irritability. Whatever diminishes the too great excitement and activity of the intellectual organ, will induce composure and sleep as a consequence; hence abstraction of blood from the cerebral vessels, refrigeration, and gyration, which promote the equalisation of the circulation, produce that effect; and when sleep is the result of any of these means, it is comparatively a calm and desirable slumber, from which much good is usually derived.

Even if sleep do not follow, previous cupping and

intestinal evacuations prepare the system for the safe and beneficial exhibition of a narcotic ; which, if these operations had not preceded, would probably have the very opposite effect to composing.

In long-continued insanity, when the brain may be supposed to be in a state of collapse—and in the incurable form, when perhaps in that of atony, sleep sometimes is a stranger, and perpetual violence and vociferation prevail. This is oftener met with in asylums where, perhaps, a meagre diet, very suitable to the majority of patients, is enforced, but which is very incompatible with the wants and condition of others. If recovery or even quiet be sought, the diet should be apportioned according to the nature of each case. I cannot think the plea of economy admissible for omitting this attention. Parsimony in some cases is extravagance, and so would too little food be in chronic lunacy.

Thus, a hearty meal for supper has been found to induce refreshing rest in maniacs where every other means has failed. This perfectly accords with a well-known law in physiology, where the brain is in that condition which long-continued insanity produces. Plentiful ingestion increases the afflux of blood to the head, and where it is deficient, as in the cachectic, it operates as an anodyne. This kind of sleep, however, in those of a full habit, rather compresses the brain and confuses the intellect, than invigorates the mind.

Tuke* and other observers have noticed, that noisy maniacs, who scarcely ever sleep, by a change from a low to a fuller diet, especially after a full meal before going to bed, and with the addition of a moderate quantity of porter, or even with porter alone, have slept soundly, and ultimately recovered.

We must be careful, however, not to conclude from

* Descrip. of the York Retreat, &c. p. 118.

such testimony that this is a practice of universal application. The patients must be selected from a thorough knowledge of their cases before the experiment is made.

When there is too much excitement of the brain, and sleep is desirable, Dr. Clutterbuck advises that the head should lie low in bed, even lower than the trunk of the body. The proximate cause of sleep, he thinks, is retarded circulation. But it is not clear that a horizontal position simply retards the circulation. At any rate, such a position will not invite sleep in the excited state of mania, where there is much vascular cerebral action, and often with great determination.

Dr. Hallaran says, that even the convalescent maniac he has observed invariably betrays ill temper immediately after rising from the most sound sleep.* He imputes this to the recumbent posture which induces determination of blood to the head; and as lunatics can rarely be persuaded to keep in a half-reclining position, it is better to encourage the erect one than suffer them to lie flat.

I generally order all maniacal patients to lie with their heads raised, on a hard pillow, or, what is better, on a hard bolster, of considerable circumference, and as wide as the bed itself, as they are apt to slip their heads aside, or even to hang their heads over the side of the bedstead.

Asclepiades advised friction of the whole body of phrenitics to induce sleep. The gentlest friction or inunction of the head was recommended by all the ancients in other mental affections; and also the sound of dropping water and murmuring streams to lull the patient to rest.

Swinging, as we see, is by all considered very conducive to sleep.

All these are innocent means, and should be tried, where sleep is desirable, before narcotics are exhibited.

* Practical Obs. &c. p. 174.

6. *Narcotics.*

Of all the remedies prescribed for insanity, except blood-letting, there is none on which there is such a diversity of opinion as on the efficacy of narcotics. Valsalva and Morgagni condemned narcotics as injurious to the insane. Regimen, labour, and exercise, some say, are the only remedies for sleeplessness.

Many proscribe narcotics altogether, others recommend them in small, and others, again, in astounding doses. Their effects are as variously described.

These contradictions, I apprehend, arise chiefly from ignorance of the distinct stages which insanity assumes, or from not noting the exact state of the patient when the narcotic was given.

All narcotics increase cerebral excitation, or a kind of sanguineous congestion of the brain, and thus force sleep. In very strong doses, they produce vomiting, convulsions, and death.

Maniacs will generally bear large quantities of opium and other sedatives better than they will support remedies which weaken the vital powers. But opium, when the excitation is great in a full and strong habit, aggravates; when the excitation is moderated by previous depletion, or the habit is reduced by long-continued mania, stimulants, like opium, wine, porter, &c., tranquillise and prove soporifics.

If, therefore, an opiate be given in the early stage of an attack of mania, before the blood-vessels and *primæ viæ* are unloaded, it may force sleep by increasing sanguineous congestion and compressing the brain; but it will certainly excite and aggravate all the symptoms. In fact, the system must be emptied, and somewhat lowered, before opiates should be administered. In the advanced stage of the disease, when, by local depletion of blood, vomiting, purging, and an antiphlogistic plan, the vas-

cular excitement is moderated, or in cases of slight temporary delirium from some sympathetic affection, or those deliria which sometimes occur in weak and highly nervous people, from biliary derangements, or some sudden moral affection, an adequate opiate will often at once remove the delirium. In delirium or mania from hepatic derangement, copious evacuation by the bowels ought to precede an opiate. In the delirium of simple nervous irritation and hysteric affections, provided there be no cerebral determination or congestion, which, however, may always be suspected, a sufficient opiate will carry it off. And should the blood-vessels of the head be evidently surcharged, they must be relieved before advantage can be expected from an anodyne.

When maniacal delirium attacks in a sudden manner, and the immediate exhibition of an opiate is indicated, a purge should be combined with it. I have often given it in combination with calomel. Before it acts it will be wise to inject purgative glysters till the lower bowels are thoroughly emptied.

It was a precaution of Cælius Aurelianus not to administer an opiate when the system was full.*

Ætius instructs us, that after evacuation, sleep may be procured in any way; but if watchfulness succeed bleeding, it is the more aggravated, and if cold water, &c. be then applied to the head, sleep will succeed.†

Sydenham's cautions against giving opiates where delirium supervenes to fever, apply exactly to their exhibition before the accelerated vascular action of the vessels of the brain is moderated, or has subsided. He remarks, that after the symptoms of great excitation are reduced by depleting remedies, and the disease has run on to its decline, both the fever and the delirium may be carried off by a *large* dose of some opiate; but that laudanum,

* De Morb. Acut. cap. xvii.

† De Insaniâ.

or any other narcotic, whether in the beginning, increase, or height of this fever, is ineffectual or prejudicial.

Burserius says expressly, that opium is only efficacious in mania after necessary evacuation, and the patient's strength is reduced.* Instances are recorded where, in mania ferox, a large dose of opium was given without previous evacuations, producing fatal apoplexy.

I think if these hints are properly regarded, more uniformity of effect from anodynes in cases of insanity, will hereafter be recorded in the treatment of it.

Weak opiates, taken through the medium of the stomach, are decidedly mischievous in mania. If good be expected, it is by giving a large dose, and repeating smaller ones till the end be attained. To fix the maximum dose is impossible. The constitution of the patient and the symptoms of the disorder must regulate the quantity. Van Swieten says, he has seen fifteen grains of opium given at once to a maniac. Dr. Binns of Liverpool gave two scruples, and another scruple afterwards, and, it is said, restored the patient immediately. Dr. Brandreth, who reports this success, says Dr. Currie adopted the practice, and that he himself gave four hundred drops of laudanum to a maniac in the greatest possible furor, which acted like a miracle; for in a few hours the patient became calm and rational.† My experience affords me no example of such large doses; but I should infer, that when they were administered, the cerebral excitation must have been on the decline, or that the brain was in that state of irritability to which in long-standing mania it is subject.

I have never ventured beyond five grains of purified opium as the first dose. In those cases where I have deemed an anodyne admissible, I generally begin with three grains, and repeat one every two or three hours.

* Institut. tom. iv. cap. vii.

† Med. Comm. vol. xvi. p. 384.

I have never in this way exceeded twelve grains; and if sleep has not then followed, I have desisted.

Various attempts have been made to divest opium of its property of stupifying the nervous system, and yet to retain its anodyne quality. Beaumè supposed its deleterious qualities resided in its resinous part, and therefore separated the gummy extract from it, and used that only for a soporific. Bouquet improved upon the method of obtaining the gummy portion, and he gives full directions how it is to be done.* Burserius recommends the latter preparation in mania. The well-known black drop is said to affect the head less than laudanum; but I have found no reason for preferring it in insanity. Modern chemistry has separated the narcotic from the anodyne principle, or denarcotised opium, leaving the morphine or anodyne portion. Of these two elements, I have tried the morphine only; but with no particular effects. Of Battley's liquor opii sedativus I have made numerous trials, and have certainly found it affect the head less, nor does it constipate so much as laudanum. But I have not found it possess the superior strength which that ingenious chemist asserts. He estimates one drop to be equivalent to three of the tincture of opium. In this respect I find very little difference in them.

Some narcotics operate, according to that able physiologist, Mr. Brodie, directly on the functions of the brain, independent on the circulation; others through the circulation.† Those which are used as soporifics in cases of mania, such as aconite, belong to the former class; lettuce, henbane, the deadly night-shade, and hemlock, to the latter. Opium and camphor, Dr. Paris supposes, act through both media.‡ This double property in

* Mém. Soc. Roy. de Méd. vol. i. p. 403.

† Phil. Trans. vol. clxxxi. p. 206.

‡ Pharmacologia, vol. i. p. 242, ed. 6.

opium may account for its exercising different effects according to the mode of its being administered. If given in mania through the medium of the stomach, by its immediate action on the nerves, it exasperates; if administered by injection into the rectum, even in small quantities, it is absorbed, and conveyed through the circulating medium, soothing and inducing sleep, and more certainly relieving delirium.

In this way M. Dupuytren has beneficially employed opiates. He has very recently published some additional remarks on the efficacy of opiate glysters, not only in traumatic delirium, but in what he calls nervous delirium, which is a mental affection he has met with, unaccompanied by fever, wound, or inflammation.* It is so similar, from his description of it, to delirium tremens, that I do not wonder that opium should be its remedy, and sleep its natural solution. There is, however, this difference; that in nervous delirium sedatives, nay, even large doses of opium, do not arrest the progress or change the course of the disorder, if given through the medium of the stomach; but if eight or ten drops of laudanum are injected *per anum*, in any convenient vehicle, two or three times, at intervals of six hours, it will remove the most furious paroxysm. This celebrated surgeon attributes this effect to the opium being absorbed from the rectum without undergoing any digestive process.

Without examining his theory on this subject, I shall avail myself of the hint, and try the plan in the first favourable case that occurs to me.

The following interesting case illustrates some of the points of practice to which the preceding observations apply, where sudden delirium from determination of blood to the head happens, and the corporeal system is exceedingly attenuated and weakened by previous sickness:—

* London Medical Gazette, No. XXIX.

A lady, about forty-four years of age, with no acknowledged predisposition to mental aberration, but of a highly nervous and anxious character, and always of delicate health, had experienced about a year before a severe domestic affliction, the shock of which instantly stopped the catamenia.

About two months previously to my seeing her, she was attacked by bilious fever, which much reduced her strength, and rendered her extremely nervous. She had for some time also suffered from a uterine complaint.

She had kept her chamber many weeks, and had only lately been able to bear being carried down to her drawing-room for a few hours.

For several days she had exhibited great nervous agitation and apprehension, which was imputed to extreme debility.

One morning a circumstance occurred which very much disturbed her, and dwelt greatly on her mind. The same morning she took some castor oil, which acted properly on her bowels, and on going to bed fifteen grains of the extract of henbane.

About an hour afterwards she suddenly started up, staring wildly about, and insisting that conspirators were forcing the door. Nothing could pacify her; and she who had not been able to move from bed for two months without the aid of two persons to dress and carry her, now jumped out with the greatest activity, walked about with a firm step, was very violent, and exhibited great muscular strength. She, however, suddenly ceased speaking, but expressed her meaning by movements.

Dr. D. Davis saw her immediately, and sent for Dr. John Sims, who had been attending the patient with him a long time. They solicited my attendance in consultation.

I found her walking about the room with great rapidity, regardless of every thing around her. Her countenance

was haggard ; her eyes projecting, fixed, and wild ; the pupils scarcely contracting on applying a strong light ; the vessels of the tunica conjunctiva evidently injected ; the skin hot ; radial pulse very small and quick ; temporal arteries beating stronger, and 114 in a minute ; and the heart throbbing violently. She spoke not, nor noticed her husband or other persons, but seemed by the motion of her lips as if addressing some imaginary being.

Conceiving that there were unequivocal proofs of determination to the brain, and fearing the consequences, if relief were not instantly afforded to the overcharged vessels, I proposed to have her head shaved, apply a scarificator and a small cupping-glass to each temple, with a view of abstracting a few ounces of blood, and cups, without scarifying (dry-cupping), over the scalp, to derive to the surface, and then to watch the effect. This plan was assented to. Owing to the entire loss of adipose, a small branch of the temporal artery was punctured in the operation, and the blood flowed *per saltum*. The pulse beat while it flowed as before. We suffered nine ounces of blood to be taken away. She afterwards appeared a little exhausted, and submitted to be led quietly to her bed, and be laid down. Pulse 104, and firmer. We agreed to give her thirty drops of Battley's liquor opii sedativus, and continue it in smaller doses till sleep was procured. She was at this time more composed, but continually spreading her hands about and snatching at the sheets, as if to lay hold of something. She spoke not. Finding her in another hour quiet and dosing, I left her. Dr. Sims stopped longer ; Dr. Davis all night ; and he repeated the opiate doses. At half-past 5 A.M. she had taken eighty-seven drops ; in the following six hours, sixty drops more. At 11 A.M. she had slept three hours. In the interim a cup of weak cocoa had been given, which her stomach rejected. She then took thirty drops of the opiate. At noon, when a consultation was held, she was tranquil,

but slightly delirious; the pulse soft, and about 100. She knew Dr. Sims. I kept out of sight lest she might take alarm at seeing a third physician. The bowels were emptied by enemata, and afterwards by pills of compound colocynth.

8 P.M. — She had had several hours' sleep, and had taken since noon eighty drops more of the anodyne, making 257 drops of Battley's solution of opium in twenty hours. Her delirium was perfectly gone, and no headach. She had no recollection of any circumstance since the attack the preceding night. Pulse 84, bowels evacuated by the enemata, skin moist, and she had taken refreshment. Next day she was further improved, and I ceased my visits. She gradually recovered, and has since enjoyed a greater share of health than for many years.

Hyoscyamus Niger.

Next to opium the use of this plant ranks in cases of insanity. It is, however, useful chiefly in those cases of nervous irritation which accompany great despondency, where it is necessary to obtain a state of quietude on which sleep may be expected to supervene. It procures rest, therefore, indirectly rather than directly. It has these advantages over opium in such cases, that it neither stupifies nor constipates.

To obtain a decided soporific effect, the extract must be given at bed-time, to the extent of from fifteen to thirty grains, or ten or fifteen grains every six hours. If prescribed merely as a calmant, four or five grains at a dose suffice; and as, in its fresh and active state, it is bulky, it is better to dissolve it in some liquid rather than make it into pills. It is apt to produce a very dry mouth and a blackish appearance of the tongue, which I have known raise alarm in those unacquainted with this effect of hyoscyamus.

It is described by Hufeland and others, who have used it freely in all cases of insanity, as reducing the activity of the arterial system, and acting as a mediator for the introduction of remedies tending to allay nervous irritation and re-action. It is, therefore, an excellent remedy in cases denominated nervous irritability and morbid sensibility.

We must not always blame the virtues of hyoscyamus because it fails in producing the effect which we expect. Like all the vegetable extracts, it is rarely met with properly prepared; or, if originally good, perhaps its virtues have been deteriorated by being kept too long. Hence its effects are very variable.

In that state of the nervous system which Hufeland describes, hyoscyamus in combination with camphor is very beneficial.

I have also tried, both in mania and melancholia, the extracts of stramonium, aconitum, and belladonna, as soporifics. One grain of the former in furious mania has procured several hours' sleep, when other narcotics, in considerable doses, have not succeeded; but the patients, in all the cases, were infinitely more violent when they awoke. Nearly the same may be said of the two latter narcotics.

However, the same rule obtains in the exhibition of all narcotics: they are not admissible during great vascular action or congestion of the brain, or a constipated state of the bowels.

7. *Blistering.*

Blistering the head or nape of the neck is another very favourite remedy in insanity; but, like the exhibition of opiates, it is generally prescribed indiscriminately, without considering the nature of the case, whether symptoms of cerebral excitation or congestion are present or not, or the stage of the malady. As with opium, blistering ap-

pears to me too often prescribed at a venture, or as an experiment, and for want of knowing what better to do.

I have frequently had occasion, upon visiting an insane person, to order the removal of a blister from the patient's head or shoulders, and in a few minutes have seen his fury abate, or cease altogether.

Blistering can never be serviceable in mania any more than opium, where cerebral vascular excitement or congestion exists, till local or general depletion has preceded. The reason is obvious. Wherever too much vascular action is going on, any application which increases that action, such as vesication of the surface produces, must be injurious. Stimulation of the pericranium directly affects, through the anastomosing vessels and nerves, the encephalon; and if there be already cerebral excitement or coma, it does harm, unless the cerebral vessels are previously unloaded.

Perhaps vesication is so generally employed in mania upon the presumption of inflammation of some part of the encephalon; but as this pathological view of the malady is disproved, vesication on this principle cannot be justified.

Besides, it is well known that cantharides when applied to the skin are liable to be absorbed, and therefore may produce dreadful irritation of the meninges of the brain, as well as of the urinary organs in some persons. In fact, such effect often takes place when the blister is applied to the scalp. Soothing the action of the brain, whether by shaving, gentle friction, or abstraction of caloric, may do good in recent mania; but stimulation is adding fuel to fire.

Convalescent patients have complained that blisters to the head produce exactly the same sensation in the brain as when they were first attacked.

Where blistering is admissible at all, it is in the more advanced stage of insanity, when vascular excite-

ment is diminished and the nervous system requires stimulating.

Vesication is more beneficial in melancholia than in mania, because in the former the vital powers are more torpid. But it by no means applies as a general rule; for it must be recollected, that melancholia often commences and alternates with violence, and manifests strong marks of cerebral vascular action or congestion, which sometimes will persist as long as in mania.

When these symptoms, however, abate, blistering between the shoulders is sometimes useful. As derivatives, blisters do more good when applied to the thighs and legs; and then if the discharge be not kept up, they should be frequently renewed.

In some cases, when so applied, and benefit has accrued, I have thought it was more to be ascribed to the attention to himself which is forced upon the patient, in consequence of the pain and inconvenience suffered from the vesication, rather than to any other effect it produced. The association of morbid ideas in melancholia, or the fixed delusion in monomania, may be thus broken and dispersed.

Without the advantage to be expected is very apparent, vesication is on other accounts a dangerous remedy. The pain it occasions induces the patient to try all means to get rid of the blister. They have been known to eat them; and serious consequences, of course, have ensued; or, by accident, they slip and adhere to some other part, greatly to their annoyance. Besides, when the constitution has been much reduced, I have known troublesome sores, and even mortification, from blisters.

Mead, John Momro, Haslam, Hallaran, and the most experienced practitioners, attach little faith to blisters.

As derivatives or counter-irritants, however, there are other, and, in my opinion, better applications.

When this effect is required, the application of warm,

stimulating cataplasmata on the soles of the feet, or to the legs, till the impatience of pain is expressed, is more efficacious.

But it is still preferable to excite vesication, where it is indicated in mania, by the application of a plaster composed of tartarised antimony and the common wax plaster. It soon occasions considerable heat, and a crop of pustules, from which a discharge may be kept up or checked at will. This application might judiciously supersede cantharides in mania; since it produces all their good, and none of their bad effects.

8. *Setons and Issues.*

Setons and issues inserted on the occiput, nape of the neck, &c. have been prescribed as derivants, to diminish cerebral irritation. I have rarely met with a case where I was quite satisfied that convalescence was the result of either of these applications. Recovery doubtless sometimes follows the introduction of them; but I have had reason for suspecting that other remedies have had an equal or greater share in the event. In two or three cases, however, in which the malady had continued some months, and there was still evident cerebral commotion, with throbbing in the head, I have certainly found these symptoms gradually decline after a discharge in this way had been established.

I think it probable, that where they have been reported to have effected a cure, the malady has originated in metastasis, by the retrocession of some cutaneous eruption or transfer of a morbid action of a remote part to the brain, or from the suppression of some long-continued or periodical discharge from the hæmorrhoidal vessels, gleet, or leucorrhœa. Drains of these kinds in such cases are decidedly useful.

Whenever any of these causes may be suspected of

having influenced the mental disorder, a seton or issue should be introduced as near the head as is convenient.

Long-established setons and issues hastily dried up, have caused many cerebral affections, and insanity among them.

9. *Artificial Eruptions.*

Derivation may also be accomplished by producing a crop of pustules.

The effect of the retrocession of cutaneous eruptions in causing cerebral diseases, and the cessation of those diseases on their re-appearance, is well known.

When any eruption suddenly recedes, most frequently the transfer of the morbid action is to the brain, and then inflammatory or maniacal delirium supervenes. Analogy in this case would point out the propriety of bringing back the original eruption to the skin, or producing one that was imitative of it. Again, the doctrine of counter-irritation, which often prompts the application of blisters, setons, issues, the moxa, &c. might well suggest the adoption of any remedy which would produce on the skin a crop of pustules in any way resembling spontaneous eruptions or natural exanthemata.

Of all the means with which we are acquainted for this purpose, tartarised antimony is the best; for by rubbing it into the skin, a local irritation succeeds, and pustules are raised which contain, and discharge most copiously, well-formed pus.

Friction of an unguent with this preparation on the shaven scalp, or neck, or between the shoulders, or on the inside of the fore-arms, till distinct pustules are produced, has been highly recommended to cure insanity. When gastric affections have preceded the mental derangement, a crop of pustules raised by this means on the epigastric region has, it is said, removed the mental affection.

Papulæ of some magnitude are consequent on this

operation, containing at first a serous fluid, which soon becomes matured, with considerable inflammation and itching. The success of this treatment in the cure of insanity had been variously reported before the celebrated Dr. Jenner so forcibly recommended it.* Of eighteen cases in which he used the tartarised antimonial ointment, five were of insanity, and three of hypochondriasis nearly approaching to it. According to his report, the effects were almost miraculous, since two or three recovered their intellects in a few days; and he mentions no case where it was tried that it did not succeed in curing these disorders.†

Where a prompt effect is required, he advises the quantity of the tartarised antimony to be increased. It is to be rubbed into the inside of the arms night and morning, and to be continued for several weeks.

Encouraged by this brilliant success of a remedy; although I had frequently tried it before unsuccessfully, and perhaps in a more active form, (for I combined about five grains of carbonate of ammonia with the ointment, omitting the two last ingredients,) yet I resumed the use of it, thinking I might have failed from not observing all the regulations he prescribes for the infriktion. I now therefore strictly conformed to them.

As Dr. Jenner conceived that this application not only vesicates, but produces diseased action on the skin itself, by deeply deranging its structure beneath the surface, and that its effect was probably owing to this deep-seated derangement, I continued the frictions till this effect was

* Letter to C. H. Parry, M.D., on the Influence of Artificial Eruptions, &c. By Edward Jenner, Esq. M.D. &c. &c. 1822.

† This is Dr. Jenner's formula: —

R Antimon. Tartar. (subtil. pulv.) 3ij.

Ung. Cetacei, 3ix.

Sacchari albi, 3j.

Hydr. Sulph. Rub. gr. v. M. fiat unguentum.

produced on the cutis. Still, I did not meet with the success which his account taught me to expect.

Where insanity has been connected with much gastric pain or irritation, and when retrocessent eruptions have been the cause, I have seen the symptoms ameliorated by this application, but I never saw the mental disorder recede so rapidly as he has described.

I have frequently had the ointment rubbed on the shaven scalp, where I wished to stimulate and have been afraid of cantharides. In one case, where the tartarised antimony was applied in a different way, I was disposed to think it was at least an auxiliary in the cure of the case: a gentleman who, though young, had lived intemperately and been troubled with dyspepsia, was attacked by furious mania. It subsided in violence in a few days. He had been very largely depleted by blood-letting, &c. before I saw him. I found him in a very weakened state, inclining to fatuity. His pulse was very small and his appetite bad. Plenty of nourishment was allowed, and tonics, and a little wine. In a few days there was an appearance of mortification of his extremities. Cinchona, opium, and wine, were administered. A warm plaster, with tartarised antimony intermixed, was applied over the shaven scalp. He complained in a day or two of great itching of the head; but the plaster was not removed. He got well very soon, and without the extremities sloughing. But whether the general treatment or the plaster to the head had the merit of the cure, I will not determine.

When counter-irritation is desired, I frequently have recourse to this remedy; for it has none of the objections to be urged against vesication by cantharides, in cases of insanity, and yields all the good to be derived from them.

I own, however, that there are few cases in which I should venture to rub in this active preparation for weeks

together, as recommended by Dr. Jenner, for it sometimes occasions very deep sloughs, which are not lightly to be treated in some cases of insanity.

10. *Bathing.*

The good effect of the bath in the treatment of insanity has been fully appreciated in all ages. But the mode of applying this sovereign agent, and the degree of temperature of the bath, have equally been matter of discussion; some recommending it to be hot, others tepid or cold. Celsus advised beginning with hot, then tepid, and lastly to pour cold water over the head and whole body for some time, and then to dry it and anoint. And he expressly says, that it is very beneficial for one who has a weak head to hold it where a strong stream of water may fall upon it. Hence we trace the douche to be of great antiquity.

Cælius Aurelianus ordered warm fomentations, applied with sponges to the eyelids, because he supposed it relaxed their hardness, and was of service to the brain by penetrating to the membranes through the eyes. Injecting warm infusions through the ears he recommended with the same view. Although we may not be quite satisfied, from this specimen, with the physiological or anatomical knowledge of Cælius, yet we must recollect that he treats very ably of the cure of insanity, and that he doubtless had experienced good effects from the topical application of warm fomentations.

Immersion in a bath at 90° Fahr. is considered generally as the most useful. The time to continue in it must be regulated by the constitution. Commonly, half an hour is the extent, keeping up carefully the temperature of the bath. But when the patient is spare, highly nervous, and irritable, he may be kept so immersed for many hours. If there be any disposition to determination

of blood, refrigerating the head while in the bath is not only a safe but beneficial practice.

According to Poggius the Florentine, in his time the insane were placed in baths to the knees, waist, or higher, as the state of the disease required. Pomme treated maniacal patients by employing the warm bath for eight hours every day, and applying cloths constantly wet with cold water to the head during the whole time. He even kept them in the bath for twenty-four hours.*

Pinel more generally introduced Pomme's plan; but he ordered that the cold water should descend on the head in a column (*douche*), varying in height according to the effect he wished to produce; sometimes limiting it to a mere sprinkling (*douche en arrosoir*) on the cranium. The intention was, to derive the circulation towards the surface, and diminish, by refrigeration, the energy of the brain.†

This practice (the *douche*) was carried to too great an excess in the French hospitals, for it was used almost indiscriminately. Much more circumspection is now adopted with this powerful remedy.

The effects which Esquirol describes the *douche* to occasion on those on whom it is tried only for a few minutes, and the precautions he previously advises, sufficiently testify that it is a hazardous remedy, and liable to be abused. I can easily conceive, however, that in judicious hands it may also, like the circulating and rotatory machines, prove very efficacious. As of gyration, so of the *douche*, much is said in favour of it as a means of repression, of calming violence, breaking dangerous associations of ideas, and conquering obedience.‡

The cold bath has had, perhaps, more advocates than the warm in the treatment of insanity. Two modes were

* Orteschi, Giornal Med. tom. ii.

† Traité, p. 329. ‡ Dict. des Scien. Méd. tom. xvi. p. 233.

principally followed: first, simple immersion, by plunging voluntarily and openly; and, second, by surprise.

Whenever a tonic plan becomes requisite, there can be no doubt that cold bathing in the ordinary way, by plunging, is efficacious. The mode adopted at the Senavra Hospital at Milan, of placing timid patients first in the bath, and then letting in the water by degrees through holes in the bottom of it, changes entirely the effect to be desired. Collapse, instead of the re-action which should follow, and which is the essence of this remedy, must be the consequence.

Van Helmont regarded the bath of surprise as the best means of curing insanity; and Baglivi, Boerhaave, &c. adopted this opinion. The latter, however, seems to have had a further view in it; for he recommends the patient to be kept completely submersed, and not taken out of the water till animation had almost ceased. His motive, therefore, was clearly to try the effect of asphyxia, or suspension of vital as well as of all intellectual operations, so far as safety would permit. In the case I have related (p. 452), where the submersion was complete, and animation entirely suspended, the delirium which had preceded continued on the restoration of the vital functions, and ceased only upon the abstraction of some blood from the head by scarifying, and the use of means to procure composure and sleep.

What may be the specific effects of the bath of surprise, I have no personal experience. It is reported in some instances, which I can credit, to have produced instant recovery of the senses. Sudden immersion, it is well known, will make a drunken person sober; and in certain deliria, such as delirium tremens and others resembling inebriation, it may restore the mind. But mania and drunkenness are so nearly allied to apoplexy, that this experiment in either state must be attended with considerable danger.

Most probably, this mode of bathing acts as terror does on the sensorium. It might cause as well as cure insanity; for the blood is driven back from the capillary vessels with such sudden and intense force on the heart and large vessels, as sometimes to suspend their action altogether; or the re-action may be so great as to occasion death.

A just apprehension of this violent remedy appears now to predominate, and therefore it is little used in those lunatic establishments where heretofore it was often resorted to. In some foreign hospitals it has been interdicted by the government.

The effect of general bathing, whether warm or cold, is imitative of the process of fever, which, as I have shewn, will suspend the maniacal action, sometimes as long only as that lasts, and sometimes accomplish the perfect restoration of the intellectual faculties. Fever gives an impetus to the circulation, and distributes the blood through the encephalon with an activity that imparts new energies to the brain.

Warm bathing immediately produces accelerated circulation; cold bathing mediately, by re-action. Hence, both are perturbators, and eventually may equalise the circulation, which, perhaps, in every case of insanity is, in one way or the other, disturbed. Consequently, provided the necessary precaution of evacuation be adopted in the plethoric, or those with a manifest determination of blood to the head, either warm or cold bathing may prove equally beneficial. In using the warm bath, the conjoint application of cold to the head may prevent the ill effects of determination, even when evacuation had not been premised; but the safer practice in such cases is, to prepare for its use by local bleeding and proper alvine dejections.

Ferriar advises the warm bath for mania, and the cold for melancholia. Half an hour immersed in the former, he says, will make a man who required six to put him

into the bath, so passive, that one may take him out.* Generally, however, the reverse of this obtains; and I confess I have found more good in melancholia from the warm than the cold bath; though in certain constitutions the cold is useful. It will very soon be discovered whether the warm produces quiet in the furious, and reaction and vigour in the melancholic; and if these expectations are disappointed, the temperature for each should be reversed.

The circulation in melancholia is often torpid; and hence, probably, the functions of the *primæ viæ*, liver, and skin, with which organs the latter so especially sympathise, are generally disturbed. Keeping up an artificial heat propels the circulation, relaxes the skin, promotes perspiration and all the natural functions, and induces refreshing sleep.

Cold bathing attains the same object when it produces re-action or a universal glow on the surface. If it have this salutary effect, it acts as a tonic; and is peculiarly adapted to that physical and mental state of debility which succeeds the active stage of insanity, and is then an inestimable remedy.

For delicate and timid persons, and for those to whom a plunging bath is inaccessible, the shower-bath, which may be either tepid or cold, is an admirable and convenient application. Those who can obtain neither, will find simple affusion of water over the head and body a good expedient. The same precautions apply to bathing in cases of insanity as in all other diseases.

Bathing in sea-water, which by many has been thought almost a specific in insanity, has no superior advantages by itself.

11. *Purging.*

Purging and vomiting, like bleeding, have formed, even in modern days, a part of that absurd system of

* Med. Reflect. vol. i.

routine treatment of insanity which cannot be too much reprobated, but which has been happily superseded by more enlightened views of the treatment of this malady. Each remedy, too, has had its advocates, vaunting its effects as infallible. Experience and more accurate observation prove all these accounts to be fallacies. Both, however, in cases of insanity, have their respective merits.

In tracing the exhibition of purgatives in maniacal affections, we arrive at the first rudiments of the healing art. The prescribing of hellebore for the cure of insanity, is the first instance of purging in the treatment of a human disease. It forms, therefore, a remarkable era in the history of medicine. It is not the least of the wonders attaching to this wonder-working herb, that for upwards of two thousand years, faith in its virtues was maintained.

Possibly, the celebrity hellebore enjoyed was derived from its being the only substance known, when it was discovered, as possessing purgative qualities; hence it was regarded as a specific. At the same time it should be remarked, that no remedy was so suitable to the existing pathology of diseases, which were then all explained agreeably to the humoral theory. We consequently find that Hippocrates, though with many cautions as to its use, and all his disciples who believe in the sportive influence of black and yellow bile, pituita, and sundry peccant humours, in originating melancholia, mania, and the varieties of insanity, prescribed it. So universal was its repute, that to ask—do you want hellebore? was synonymous with saying—you are mad!

Even hellebore, however, has experienced the instability of popular reputation; for, in the middle ages, Tral-lianus* tells us that it had grown into disuse, and was

* De Melancholiâ.

superseded by the famous Armenian stone, which was much less dangerous; and according to Nonus, a Greek physician in the tenth century, the latter was still preferred. However, hellebore was never wholly exploded.

But brisk purging began to be dreaded. The Arabian physicians especially, feared the too great activity of this plant; for Avenzoar recommends the flowers of *nymphæa* to be mixed with it, in the same way as mastic is prescribed with aloes and scammony, and sweet almonds with *coloquintida*, viz. to correct their effects. Its reputation afterwards revived. Many fatal accidents, however, occurred from its use, notwithstanding the different expedients to guard against its virulence. Cophon, an Italian physician of the 12th century, had a very refined mode of preparing it: a chicken was to be fed with white hellebore, and after eight days was to be killed and made into broth, and this was to be taken as a gentle purge.

Morgagni lost a patient in melancholia who took half a drachm of the extract of black hellebore, and he ascribes his death to not having taken whey after it, as he always prescribed. It produced great purging and vomiting; and the stomach and intestines in this case were found inflamed, and the brain particularly soft and lax.*

Both species, the black and the white, were commonly administered. Black to cause dejections in melancholia; and white vomiting, when the patient was too high and merry in mania. In these diverse intentions of the two species, we recognise the principles both of purging and vomiting in the treatment of insanity. In the paucity of medicinal remedies during the infancy of the curative art, a plant endowed with these double properties was invaluable: the one species caused the evacuation of those morbid biliary secretions which generally mark

* Epist. xlix. art. 15.

melancholia ; and the other occasioned either vomiting, or that nausea which subdues or regulates the fury of mania. It has been thought probable, from the different accounts given, that the genuine black hellebore of the ancients was lost, because that which is now found is a very innocent medicine.* Ages ago, from the disappointment experienced in its effect, it was supposed that the hellebore of Anticyra, so vaunted by the ancients in the use of insanity, was a different plant. But from Morgagni's case, and others' experience, every idea of its innocuous powers must be abandoned. Besides, if the experiments and observations of Schabel, of Weissembourgh, on the properties of hellebore, be correct, it is clear that both species are virulent poisons, equally injurious to animal and vegetable life. Their influence, he conceives, is exercised on the human system through the medium of the circulation ; their action being most marked when applied to organs well furnished with blood-vessels, and especially the mucous membranes. Nevertheless, this once universal remedy is still held in high estimation in many parts of the continent, particularly in Germany.

I have tried the powers of both the black and white species, in the form of extract. The operation has always been very uncertain, and I never found in their effects, either on the mental disorder or in the nature of the excretions, any thing particular, or differing from the action of other purgatives or emetics. I have, therefore, long since discarded hellebore.

Keeping the bowels in free action is indispensable in all cases of insanity, but absolute purging in the incipient and active stages is especially necessary. The secretions at these periods of the disease are almost always bad ; more morbid perhaps in melancholia than in mania.

* Ferriar, *Med. Reflect.* vol. ii. p. 104.

Montanus inveighs against half purges, which tire nature and molest the body to no purpose.* Thomas Willis seems to have been of the same opinion. His purging formula in melancholia was: calomel and extract of black hellebore, each a scruple, and extract of jalap, six grains. Either the human constitution was more vigorous, or these ingredients were not so potent as at present, for such a dose in these days would be dangerous.

I observe no stated days or periods for purging, but am governed by the circumstances of the case. And when the evacuations have become natural, I endeavour to keep them so by exercise, diet, and such means as are best calculated to preserve the functions of the body in health.

Drastic purgatives may be indicated in the first instance, not only to overcome the torpidity of the bowels common in incipient attacks, but also because there are often large quantities of morbid bile or scybala collected in the colon and large intestines, the evacuating of which will sometimes at once greatly diminish the cerebral irritation and delirium. And for this purpose very small doses (the sixth or fourth of a grain) of elaterium have proved very beneficial. Calomel, in conjunction with other cathartics, is very useful.

When the evacuations prove of this description, strong purges must be interposed; but the bowels in the interim should be kept regular by milder cathartics. If vomiting and purging are desired at the same time, I give a solution of Epsom salts, with one grain of emetic tartar to each ounce of the solution, and of this a table-spoonful or two every half hour, till both or one of the effects be produced. If great activity of the bowels be required, two grains of emetic tartar should be added to six ounces of the common

* Consil. 30.

senna mixture, and three or four table-spoonsful of it be repeated every two, three, or four hours, till it freely operates.

An impression prevails, that the bowels of all lunatics are difficult to move. This is a dangerous error that should be exploded, for they are often free to act, and sometimes are very irritable. Caution, therefore, at first ought to be observed. My practice has been to begin with moderate doses, and continue purging at intervals so long as the excretions bear an unhealthy appearance, and to remit it as they improve, always having regard to the constitution of the patient.

As men of studious and sedentary habits are often affected with melancholia and hypochondriasis, it should be remembered that they, especially, can never bear violent purging. Their intense application and abstraction generally brings on a cachectic habit. Hence, remedies which either strongly excite the nerves or produce large evacuations, induce in them debility—the one directly, the other indirectly.

Means of obviating Constipation.

Where the system is much exhausted, either by long-continued violence, or for want of a proper quantum of nutrition, or disability of assimilation, all which conditions are frequently met with, drastic purges are out of the question. Glysters are then the only resource.

Very old and paralytic lunatics sometimes lose the power of evacuating the contents of the bowels, and an immense load accumulates in a hardened mass, forming, what is vulgarly called, a ball stool. This state is generally discovered by efforts to go to stool, and passing only a thin fæcal discharge, though with a great sense of forcing down of the rectum, and there is often an impediment to the passage of the urine from pressure of the ball on the

neck of the bladder. As soon as this case is suspected, an examination *per anum* should take place; and if it prove so, the means advised (see pp. 228—229) should be used.

Obstinate cases of constipation are most frequently seen in public lunatic asylums, among the lower orders, whose bowels, from habitual neglect, have become thus inactive. Such cases are much more rare in private practice.

I fear that the general impression of the difficulty in getting the bowels of insane people to act, must be imputed to that neglect of them which is consequent on a lunatic's indifference to the performing of all natural functions. This fact ought not to be forgotten. The bowels of some lunatics are disposed to act too much, and are not easy to restrain. We should therefore be careful, when the patient is a stranger and his history obscure, lest we rashly prescribe cathartics too drastic and powerful.

The determined resistance often met with to the taking of any medicines, or of submitting to any means of relieving the bowels, renders these cases very difficult to manage. It is of importance, then, to have recourse to such purgatives as from their bulk and insipidity can be best disguised. A dose of calomel mixed with a grain or two of tartar emetic to give it activity, is a convenient form. I have often succeeded, by putting this between two pieces of buttered bread, in getting it down. The croton oil may also be sometimes administered, rubbed down with a little sugar and mixed in a little beer. The elaterium, in point of bulk and certainty of effect, is an excellent medicine; but, unfortunately, it is so nauseous that it cannot be disguised except in a pill, and that is a form, if refused, very difficult to make them swallow. There is this objection, too, both to the croton oil and the elaterium, that intense nausea and vomiting sometimes follow. In one case, the former created so much

nausea without purging at all, that it never ceased for a week, and I thought my patient would have died. The elaterium has never failed to purge when I expected it, but it has sometimes operated to an alarming excess. We must, therefore, be well acquainted with the strength of the patient before we venture on these powerful remedies.

Real costiveness, when it is concomitant with deranged mind, most commonly, and perhaps always, is met with in persons much extenuated, and where determination of blood to parts remote from the intestinal tube is apparent. Extreme constipation is sometimes succeeded by diarrhœa, which either terminates the mental affection, or proves colliquative, and carries off the patient. This diarrhœa, in either case, may be suspected to arise from a change in the determination from distant parts to the villous coat of the intestinal tube; and the event of a cure or death is probably dependent on the strength of the patient's constitution.

On the contrary, when a long-standing chronic diarrhœa, which has brought the sufferer to the extremity of life, has been suddenly checked, and the course of the determined fluids is changed, regularity in the alvine discharge has returned, and the vital powers have rallied, though at the expense of the intellects.

But the constipation of insane persons is sometimes exceedingly obstinate. This, doubtless, often proceeds from the want of that influence which the nerves exercise on the intestinal canal, as well as from the voluntary retention of fæces so common in lunatics. This persisted in, may at length induce a torpor destructive of the peristaltic propulsion of the fæces.

From the influence of the electric fluid on the nervous system, galvanism has been successfully applied to remove obstinate costiveness. Purgatives in a case referred to had little effect; but galvanism, applied twice a day for half an hour, always produced a stool, preceded by a

rumbling noise in the bowels.* I have had no occasion to try the effect of galvanism in any case of insanity; but I conceive it may be very useful in constipation connected with cerebral affections; for I saw it exercise a sure and irresistible operation on the bowels in a very interesting case of chorea. A young gentleman, aged fourteen, had for several days together lost all power over the voluntary muscles, so that he neither swallowed any thing nor evacuated the bladder nor rectum, and it was impossible to inject glysters with effect, from spasm of the sphincter, as well as from his constant jactitations. The patient had been placed under the care of Mr. Le Beaume, for a course of galvanism for a spasmodic affection. I was consulted, from an apprehension, owing to the singularity of his conduct, that the functions of his mind also were deranged.

The application of galvanism never failed to influence the bowels and bladder, so that both evacuated their contents; the muscles connected with deglutition were at the same time relaxed, so that he could then swallow with ease.

This is not only a safe mode of causing evacuations, but is conducive to the restoration of a healthy action of the bowels; since the stimulus of the galvanic fluid increases the circulation in the intestines, gives energy to the peristaltic motion, and relieves the brain.

Various devices are used to overcome both involuntary and voluntary retention of the fæces; and any means that will accomplish the object are better than tormenting the stomach and rectum with drastic purges.

Suppositories introduced into the rectum, such as a piece of common soap or a twist of tobacco, or irritating the sphincter ani with a feather, will often answer the intent.

* Edin. Med. and Surg. Journ. July 1820.

When all other means have failed, and the necessity for evacuation has become urgent, surprise will occasion the sphincter muscle to relax, and expel copious dejections. In La Salpêtrière I saw a strong arm-chair, like a night-chair, fixed to the ground, in which when the patient is firmly seated, a stream of cold water is suddenly propelled from a *douche ascendante*, full on the anus. The shock it occasions generally produces the wished-for effect. This, however, might fail on a second trial, with a cunning lunatic.

At the Glasgow Asylum I placed myself for a few minutes in a vibratory chair of great strength and power, in which when a patient is seated, he experiences a far more violent jolting than from the roughest-trotting horse. Such tremendous motion being given to all the viscera, I should think, would conduce most effectually to correct habitual costiveness; and if persevered in as a punishment, it must also soon break the resolution of constrained constipation.

Lunatics are but children of a larger growth. Their minds reason not, but they become the creatures of habit. Hence they may be led to do many things which neither reasoning nor persuasion can accomplish. We know that infants a few weeks old, if well managed, will, instinctively, have an evacuation upon being held in a certain position, and provided due regard be paid to a regular time. So I am persuaded will lunatics, generally, acquire a regular instinctive action of the bowels, whether they are perverse, indifferent, or fatuous, provided they be forced to go to the water-closet daily, at that stated time when nature in health makes the call. I have tried this plan with many where an opposition or disinclination has shewn itself, and have thus imperceptibly conquered it. I say imperceptibly, because the practice must be adopted as a matter of course, and not as a request or favour; for if the object desired be known, it would put

the patient on his guard, and he would most likely purposely restrain the impulse.

If the movements of those who are unconscious of the calls of nature were carefully watched, the indication of their wants would soon be properly interpreted, and many filthy habits and much trouble be thereby avoided.

I have been consulted on cases of insane persons whose bowels, either from neglect or the difficulty of getting medicines taken, have been constipated an extraordinary time without apparent injury to the general health. Although the constitution possess the power of accommodating itself to the retention of the fæces for a length of time which seems incompatible even with life, as in the case, related by Dr. Baillie,* of Robert Hertsell, who, from a stricture in the rectum, lived nearly fifteen weeks without a stool, yet such instances should never influence us in the management of the insane.

Nature seeks and requires a daily evacuation of the bowels and bladder; and a deviation from that habit begets other functional derangements, and thus commences corporeal disease and mental disorder.

12. *Vomiting.*

There is no remedy for the cure of insanity that has been more generally or strongly recommended than vomiting.

Evacuation, says the elder Monro, is the best cure, and vomiting preferable to all others; and if not carried beyond the patient's strength, nor crowded too fast upon him, his health of body will visibly improve so long as vomits are continued. The prodigious quantity of phlegm which accumulates, he observes, is not otherwise to be got rid of; and he adds, that purges do not operate

* Trans. Soc. Med. and Chir. Know. vol. iii.

so well till after vomits. Hallaran, however, advises, that purging should precede vomiting.*

The opinions of Monro are certainly strengthened by the practice of many, before and since his day.

I am disposed, however, to think that the action of emetics when beneficial in cases of insanity, is not conducive to that end simply as an evacuant, but rather from the well-known effect vomiting produces on the circulation.

During the nausea first induced, the circulation is in a condition resembling the cold stage of fever; and when vomiting commences, the whole vascular system is in commotion, and an equality in the circulation ensues, which removes those local determinations to the brain which disturb its functions, and occasion delirium and mental derangement.

Dr. Bryan Robinson gave emetics daily for a whole year, and sometimes twice a day, with great success, in the cure of insanity;† and Dr. John Monro gave a gentleman sixty-one emetics in six months, and also for eighteen successive nights, by which the patient was recovered.

Unfortunately, the question here recurs which is perpetually presenting itself when specific virtues are ascribed to remedies in the cure of diseases. Might not the efforts of nature, or the effects of diet, management, or other remedies, have restored these patients, and in less time than the emetics? The answer does not recommend the practice; for, twelve months which the cure of Robinson's patient occupied, and the six which it took Monro to cure his, are periods beyond the average which the majority of cases require to recover.

Influenced, however, by the strenuous recommendations of emetics for the cure of insanity, I gave them a fair trial; and in several cases relied upon their operation

* *Observ. &c.* p. 84. † *Obs. on Medicines*, p. 145 et seq.

together only with purging. I used in turn every substance in the *materia medica* possessing emetic properties, and marked with attention the effect of each; but I must conscientiously declare, that, after several years' perseverance, my confidence in emetics alone in cases of insanity has been entirely dissipated.

Ferriar asserts, that he has known dangerous debility in this malady brought on by a single vomit of emetic tartar.

A vomit is sometimes given to refractory patients as a punishment. This is very inconsiderate, for no lunatic is at all times in such a state that vomiting may be excited without risk. Besides which, a prejudice against all medicines is raised, that nothing afterwards may be able to subdue.

Still, I have occasionally recourse to emetics, but only as I would in other diseases,—to free the stomach from troublesome ingesta, accumulated phlegm, or morbid bile; and sometimes to give activity to torpid viscera, and rouse and emulge the general system.

In melancholia, vomiting is decidedly more useful than in mania; for in the former the stomach is more apt to be loaded with *saburra*, and the viscera to perform their functions languidly. Then the action of an emetic, while it clears away the cause of offence, invigorates the powers of digestion and assimilation, and conduces to corporeal and mental health.

Emetics are occasionally useful, too, by interrupting intense abstractions, and morbid hallucinations, and capricious resolutions. Where the urine has been retained from obstinacy, the operation of an emetic will generally evacuate the bladder. In like manner, it sometimes will act on the rectum when the *fæces* are withheld.

In the apoplectic and hemiplegiac diatheses, it has been remarked, that powerful doses of emetic tartar are

required to induce vomiting. The same may be generally observed in all diseases, as well as in insanity, where there is cerebral congestion. I have given to the extent of a scruple of it at a dose without the least nausea, in cases of mania where, as soon as the congestion was relieved by the abstraction of blood from the head, a grain or two has vomited.

So, likewise, where the object has been merely to induce nausea to abate symptoms of great excitation. Till the vessels of the head are unloaded and the lower intestines well evacuated, a large dose is required ; afterwards, a smaller will produce the effect.

These, however, are general remarks, not without exceptions ; for sometimes, though rarely, the insane experience much gastric irritation, and then the slightest dose of any nauseating medicine cannot be borne on the stomach.

13. *Nausea.*

The action of nausea and vomiting is very opposite : the former diminishes the power of the heart, and retards the circulation ; the latter increases the action, and determines the circulation to the surface. Emetics, therefore, exciting vomiting, or only nausea, may in the one event be of great service, in the other do infinite mischief. This observation especially applies in the treatment of insanity, and ought particularly to be regarded.

Nausea exercises a powerful control in mania. To the sensation it creates, the whole attention of a maniac is often directed. In this respect it acts like any thing that excites local pain. While nausea lasts, hallucinations of long adherence will be suspended, and sometimes be perfectly removed, or perhaps exchanged for others ; and the most furious will become tranquil and obedient. In mania furibunda it is an excellent auxiliary, not only

because it subdues violence, but because of its controlling power over the circulation.

Indeed, it is far safer to reduce the patient by nauseating than by depleting him. The effect of the former, when artificially produced, we can check and counteract when we please; the effect of the latter is not within our control, and often leaves lasting proofs that it has been injudiciously practised.

Doses of emetic tartar at such intervals as will keep up the nausea, rarely fail to reduce the most stubborn to subjection. Sleep, also, which in these cases is so desirable, will sometimes occur while in this state. This plan should be continued so long as it is positively useful, and no longer. I have known it pursued for a fortnight, and the hallucinations by degrees dispersed, or so weakened that the cure has been quickly accomplished.

But in melancholia, nausea never ought to be excited intentionally as a remedy. The hallucinations in this case are generally full of suspicion, and especially of poison; therefore, any thing that disturbs the stomach the patients are apt to suspect is given with an evil intent, and it prejudices them against all other remedies, and, what is more material, against their food. The operation of an emetic they understand; and though very disagreeable to them, it excites no false alarms; but the terrors they endure in protracted nausea, is to many a realisation of their worst apprehensions.

Besides, in melancholia, where the vital powers are apt so suddenly and unaccountably to give way, exciting nausea, which is itself a state of collapse, and enfeebles the system, may have dangerous consequences.

14. *Salivation.*

Mercury has been recommended in the treatment of insanity, both from its peculiar qualities as a cathartic and a sialagogue.

As a purgative, in the form of calomel, it is certainly highly useful, either by itself or in combination with other cathartics ; but it possesses no antimaniacal properties. I prefer it in most cases, either in combination with, or followed by other purgatives. It then acts better on the liver, which is often in fault both in mania and melancholia ; and those slight deliria frequently consequent on the accumulations of morbid bile which so peculiarly influence the nervous system, are oftener dispersed by this mode of purging.

Mercury is likewise extremely useful in combination with opium, emetic tartar, digitalis, squill, &c., when particular effects are desired, as in other diseases.

As a sialagogue to produce salivation, I think it probable mercury may have been first prescribed from observing that ptyalism was a symptom often attendant on insanity ; and likewise that recovery had succeeded mercurial salivation.

Hitherto I have viewed the efflux of saliva in maniacal persons as purely symptomatic, and occasioned by irritation from local determination to the salivary glands ; for it generally appears on the access of or during the paroxysm, and not on the decline of it.

Mercury, by its acknowledged power of equalising the circulation, may restore the balance between the vascular and nervous systems, and thereby remove that morbid condition of the brain, which, perhaps, originates intellectual derangement, while no such effect would arise from spontaneous salivation.

Analogy, too, supports this inference ; for the excitement from mercurial action very closely resembles febrile excitation ; and those conversant with insanity know, that a smart attack of fever, from whatever cause, often effects a perfect cure of the mental disorder.

Yet, expectation of such an effect proving critical in disorders of the mind, ought not to be sanguine ; since

we know how easily a copious flow of saliva is excited, through the medium of the mind, on the anticipation or odour of savoury viands, and that this is a frequent symptom in hysteria and many other maladies, without occasioning any abatement whatever of the disease. Ptyalism is also incited by chewing certain substances. Cælius Aurelianus notices it as a symptom characteristic of cerebral affections.*

Although it was known to Theodoric, the friar, in the thirteenth century, that mercury would produce salivation, yet it was not much employed till the sixteenth by Paracelsus. Nor is mercurial ptyalism mentioned, I believe, as a remedy for insanity till the following century. Thomas Willis, who makes little difference between madness from the bite of a rabid animal and mania, advises salivation among other chirurgical remedies.†

As the effect of mercury is obviously stimulating and calculated to rouse the circulation, salivation might, *à fortiori*, be considered a useful adjunct in those cases where there is an evident torpidity in the vascular system. I had, however, never prescribed it with a view to salivate in any case of insanity, when my attention was aroused by the sudden recovery of an insane patient from accidental mercurial salivation.

I shall quote an abstract of the original case:—‡

Miss C. was a very respectable woman, aged forty, of a leuco-phlegmatic temperament, gray eyes, dark-brown hair, and very corpulent. Her disposition was equable, though rather melancholic. She had for several years conducted a prosperous business; but her occupation was sedentary, and admitted of little variety.

In the spring of 1817 she became very dyspeptic,

* De Lethargo, cap. ii. † Omnia Oper. de Maniâ.

‡ Lond. Med. Repos. vol. xiv. p. 273.

nervous, and fanciful. She was unhappy, without any real moral cause.

A short time before, a female acquaintance, in lifting a heavy basket, had experienced an umbilical hernia, for the cure of which she had submitted to an operation. This incident produced such a deep impression on Miss C.'s mind, that she at length insisted she also was afflicted with hernia, and must undergo a similar operation. No reasoning could convince her that her apprehension was groundless. This hallucination obtained too firm a hold to be shaken off; and it made her truly miserable. Although the predominant, yet this was not the only mental illusion. She grew generally gloomy and suspicious, and had a strong dread of approaching poverty.

Early in June she was so low-spirited and morose, that her friends were alarmed, and consulted her medical attendant, Mr. Hunter, sen. of Mincing Lane. That gentleman prescribed a most judicious plan to be pursued; but she was refractory, and rejected his advice; and her friends, unfortunately, did not enforce it.

A few days after, she contrived to squeeze herself through a small stair-window, apparently of dimensions inadequate to admit her passing, and from which there was a perpendicular descent of about thirty feet to the pavement of a court behind her dwelling. Luckily, and unknown to Miss C., some empty beer barrels had been piled up immediately under this window, and upon these she fell. By the interposition of these barrels, the height was reduced; and by the effect of gravitation, she happily came on her seat. By this means, the suicide she meditated was prevented.

She was taken up, apparently not much injured, and walked into her house. Messrs. Hunter came to her assistance. On examination, one of her legs was found to be

considerably bruised. She complained of no other part. She was copiously bled, purged, and received such medical attention as her case required, and was very prudently placed under the supervision of a nurse accustomed to insane persons. Fever followed, without any abatement of her mental disorder. It had been, in the interim, discovered that the right buttock had received a most severe contusion. A week after I first visited her. The countenance presented an extreme cast of despair and melancholy. There was considerable pyrexia, pulse quick, tongue furred, bowels disposed to be inert, catamenia regular. The whole of the injured nates was in an entire state of sphacelus, of extraordinary extent. The propensity to suicide was still very active; for although, from bodily inability, she could not move from her bed, yet, by various and unequivocal little plots, she plainly indicated that was still her intention. All the features of the case at this stage were, indeed, very unpropitious.

Regardless of the mental affection, except as far as the necessary precautions against her attempting any violence on herself, and the avoiding of every topic likely to encourage her despondency, my first object was to prescribe such means as might arrest the progress of the mortification. Sloughing to a great extent, and an immense discharge, took place, without any abatement of the mental affection.

The patient's health varied much, and at length appeared to give way. Change of air, however, produced a sensible improvement.

She had been for some weeks taking a tonic; and as the kidneys were indolent, and the legs œdematous, calomel and squills were combined with it.

She now mended every day and was very tractable; but all her pristine mental aberrations prevailed. After persevering in this plan a fortnight, she caught cold

by falling asleep with the window open ; the consequence was, salivation, but not excessive. It was suffered to take its course. Concurrent with this ptyalism was an instant amelioration of the mental symptoms. She grew more cheerful, and every aberration by degrees vanished. Three weeks from the appearance of the salivation she was so well that I took my leave.

In two other cases of insanity, which were nearly contemporaneous with this, sanity supervened to accidental mercurial salivation. One was a patient of Mr. Upton's, of Throgmorton Street ; the other, of the late Mr. Lincoln's, of Hatton Garden. In both a perfect restoration of the intellects followed ; but from the neglect of proper precautions by the relations, the latter, an elderly lady, soon relapsed, and she died paralytic and insane, about a year afterwards.

An inference might be deduced, from the event of these cases, that the occurrence of salivation is a natural solution of insanity, and that we have only to superinduce it, to re-establish the integrity of the understanding. But such a conclusion would be attended with that disappointment which almost always ensues from generalising on the cure of particular diseases on the authority of a few insulated cases. Yet the facts disclosed are indications of sufficient importance to lead to a serious consideration in what degree the exhibition of mercury in the treatment of insanity may be useful.

None of the cases of recovery said to have succeeded a spontaneous flow of saliva are, I think, detailed with sufficient clearness to decide whether the cure was really consequent on this phenomenon. In the case of melancholia alleged to have been so determined, of which an abstract is given in the Fifth Number of the Journal of Foreign Medicine and Surgery, a particular exudation from the mammæ was observed, which might also be

deemed a critical discharge; and there were several precursory signs of convalescence.*

Every species of insanity, not arising from malformation or organic lesion, may be cured spontaneously. Such a termination often happens, and surprises us. I will not, therefore, assert, that the maniacal action never ceased in consequence of spontaneous salivation.

The rage for prescribing this mineral, as a panacea in almost all diseases, has already tempted many to try it, and pretty indiscriminately, in maniacal cases. However, we may fairly infer, that the success of it has been equivocal; otherwise we should have heard more respecting its antimaniacal virtues.

The result of the above cases convinces me that there are certain maniacal conditions in which the efficacy of mercury is indisputable; but what those conditions are we do not precisely know.

I remarked, that in all these patients, except one, the symptoms of excitation were previously much abated; probably from the previous evacuations they had undergone. The exception to which I allude, where ptyalism from mercury was induced while the system was under considerable excitement, was Mr. Upton's patient; but even in this case, depletion had been copiously premised. Ptyalism here was produced by absorption in a way very unexpected. She had received a cut on her lip from having bit a wine-glass to pieces. Some calomel had been prescribed in the form of a pill; but this she always chewed and spat out. I therefore ordered it to be mixed with a little white sugar, and poured into the mouth—a mode I often adopt when I cannot get a pill swallowed. It was repeated, and each time some of it, of course, was sprinkled inadvertently upon the recent cut. The powder

* Pinel mentions a case of mania brought on by intense application, which ended on the sixty-sixth day by an abundant spitting, favoured, he adds, by the use of smoking.

was followed by a common laxative draught, which together operated well. Two days after, a copious salivation was established.

I have subsequently made many attempts to cure insanity by mercurial salivation; and although ptyalism has been accomplished in several, yet I never succeeded but in one case to restore the mental functions by it. This also was in melancholia.

There is a case related by Dr. Smith, of New York, of the cure of mania by salivation, which, as it supports the practice, and imparts some curious circumstances attending the recovery of the patient, I shall insert it: "In August, Mary Matthews, aged seventeen, was suddenly seized with mania, and, though naturally feeble, required uncommon force to restrain her. She was lost to all decency; bowels constipated for nine days, and had continued as long without food or sleep, singing with undiminished vehemence. Her violence prevented bleeding by the arm; but about six ounces of blood were taken away by cupping-glasses applied to the occiput, temples, and forehead. After this she became more calm, and took a little nutriment. On the 20th, as she was equally as violent, another attempt was made to draw blood by cupping, but with no other effect than to make her faint.—23d. Although her efforts were the same, yet her strength was diminished.

"Dr. Smith determined to try the effect of salivation. Three drachms of strong mercurial ointment were rubbed in.—24th. The gums were slightly affected. As the soreness of the mouth came on, she grew more calm and rational, took food and purging medicines, and was quite tractable. The friction was discontinued. The interval of reason was only of a few hours. The same night the purgatives operated, and brought away large masses of dark and hardened fæces.—25th. The mercurial friction was renewed. A gentle salivation was excited, and her

reason restored.—26th. Medicines and regimen to recruit her strength were prescribed. For several days she was affected with occasional fits of anxiety and distress, such as had occurred during the recurrence of her original complaints, after the first interval. These paroxysms were always troublesome about 2 P.M., when there was an increase of heat and pulse. She gradually amended; on the 7th of September returned to her friends, and several months afterwards continued well.

“ She was conscious, she said, of her nakedness, and of several other circumstances during the insanity; that she felt something like wind rising from her stomach to her head, and that her heat of body was so intolerable that she could not endure the least clothing. Soon after she recovered, her feet were affected with such a burning sensation that she was often obliged to put them into cold water; and she was much annoyed with frequent flushings over the whole surface of the body for several days.”*

A case of apoplexy ending in mania is related by Ferriar,† where recovery commenced on ulceration of the gums taking place consequent on a course of calomel; and the cure was completed by supporting a gentle ptyalism.

The frequent resistance of the absorbent system to the action of mercury in mania is remarkable. Perhaps it may be accounted for on the well-known principle in the animal economy, that when any irritation is already existing, the system is less susceptible of another irritative process. Hence the cerebral irritation in mania proves a bar to the mercurial irritation.

In Dr. Smith's case of mania, the strength of the patient was a good deal reduced before mercury was

* New York Med. Repos. vol. i. p. 174.

† Med. Inq. vol. ii. p. 72.

exhibited ; for which reason, possibly, it was so readily imbibed.

Mania resists the action of mercury more obstinately than melancholia, as it does of all remedies that are supposed to influence through the medium of the circulation.

Notwithstanding the ill success which has attended my attempts, where other means fail, I shall not hesitate making trial again, in obstinate cases, of mercurial salivation, always first prescribing evacuants.

As an alterative, in cases of insanity attended with glandular or cutaneous affections, or where the chylopoietic functions are deranged, mercury is of undisputed utility.

15. *Digitalis*.

Possibly, the testimonies of British practitioners are more at present in favour of the powers of digitalis in mania and melancholia than of any other remedy. Indeed, some ascribe to it a specific antimaniacal virtue.

Its power in influencing the action of the heart and arteries is acknowledged ; and as the pathology of insanity which I advocate refers mental derangement in the first instance to derangement of the circulating system, it may hence be inferred that I entertain a high opinion of the qualities of digitalis.

Dr. Cox* ranks it next to emetics as a remedy in madness ; and thinks that its efficacy is as much to be attributed to the nausea it creates as to its direct power over the circulation ; and that its effect is not transient, as the nausea produced by other medicines, but will remain a long while after the use of it is discontinued.

Dr. Hallaran† is a still warmer admirer of the virtues of this plant as an antimaniacal remedy, and strongly recommends it “ as a medicine peculiar in its effects, and,

* Pract. Obs. on Insanity, ed. 2. † Prac. Obs. on Insanity, ed. 2.

under proper limitations, admirably calculated to the present intention." He conceives that much discredit has attached to it from not observing certain preliminaries before its exhibition; and he thinks he has had satisfactory proof "that the digitalis is not eligible in any case, unless where the system is previously reduced by proper evacuants; and although its sedative quality, as far as regards the circulation, will not be questioned, yet, that this cannot be usefully exerted under the pressure of high arterial action."

Such is Dr. Hallaran's confidence in the effect of this medicine, when judiciously administered in real maniacal cases, that he as firmly expects recovery from it as he does from mercury in syphilis. He farther remarks of its properties, that besides its capability of restraining within due bounds the action of the heart and arteries, it possesses remarkable anodyne and soporific qualities, and none of the formidable objections which attach to opium in maniacal cases.

He cautions against carrying the use of it too far, lest, by producing paralysis or extreme debility, the existence of the patient should be endangered; and advises its suspension when there is pallor, inability of retaining food, vertigo, dilated pupils, and slow intermitting pulse, with cold extremities, which condition should be met by volatile stimuli and cordials. Moderate purging during the interval of suspension secures a safe return to its exhibition.

He recommends beginning with five or ten drops of what he calls the saturated tincture thrice a day, and gradually increasing the dose. When arrived at one hundred and fifty drops daily, in three doses, he stops at that quantity for ten or twelve days; he then proceeds, he says, to increase it to one hundred drops at a time, with safety and advantage. But when there has been occasion to suspend it, he always recommences with ten or twenty drops, adding one drop to each successive dose daily.

I have never carried the dose beyond fifty drops of the tincture of digitalis of the London Pharmacopœia. Even in that quantity, by gradual increment, I have seen effects produced that have alarmed me for the safety of my patient; and therefore, if it has not answered in that dose, I have desisted from carrying it further, or suspended it altogether.

Besides premising depletion, and purgation with calomel, Dr. Hallaran advises mercury to be given internally, so as to produce moderate salivation, as preparatory to the exhibition of the digitalis.

Without any of the enthusiastic admiration and confidence in the virtues of the foxglove as an antimaniacal remedy which this respectable physician professes, I perfectly concur with him in considering it as having a very powerful influence, when properly administered, in all stages of insanity accompanied with great vascular excitement and a rapid pulse.

I believe, also, that if the general rule he lays down, of previously depleting, and evacuating the bowels by calomel purges, be adhered to, the operation of digitalis will be found much more uniform, not only in insanity, but in many active diseases where it now often proves ineffectual.

Where mercury has been pushed to ptyalism preparatory to the exhibition of digitalis, and recovery as soon supervened as Dr. Hallaran mentions, it may be doubtful to which remedy to ascribe the cure.

The preliminary course of lowering the general system by depleting and purging, before the sedative and calming power of digitalis will have effect, exactly corresponds with my own experience. This plan, as I have stated, applies also to opium and other narcotics, given to procure composure and sleep in maniacal delirium.

In fact, it is obvious that none of the most efficacious internal remedies recommended in mania are admissible,

unless anticipated by evacuants. It would seem, indeed, that the vascular system in this malady is at first so excited, that it resists the powers of all remedies which act on that system, till it be lowered, so as to be capable of producing re-action.

In reference to the use and effect of digitalis in mania, it will be seen that I have drawn copiously from the observations of Dr. Hallaran. I confess, however, that I have not had such surprising success with it in the cure of insanity as he and his correspondents describe. I may not always have observed so strictly the essential and preliminary rules. At the same time, I have seen sufficient of its powers to have much confidence in them.

Dr. Ferriar has remarked, that when digitalis, camphor, and opium alone, have been found ineffective, each has proved serviceable when combined with cinchona. This is contrary to my experience.

In closing my remarks on the utility of this plant as a remedy in insanity, and the causes of its failing so frequently to produce the desired effect, we must not altogether impute such failure either to idiosyncrasy in the patient, or the unfitness of his system for its reception. For digitalis is peculiarly open to the objection justly charged upon the whole tribe of vegetable narcotics, in whatever form they are presented for our use; viz. that their qualities are affected by such a variety of circumstances, that the same preparations at two different seasons or periods rarely accord in their properties; hence, such diversity in their effects.

Whenever remedies so active and dangerous are prescribed, the case must be proportionably important. It behoves those, therefore, who are actuated by proper zeal for their profession, and regard for their own reputation, not only to remember this objection, but, by a strict attention to the directions in the Pharmacopœia for the preparation of vegetable remedies, to obviate it.

16. *Prussic Acid.*

The effect of this potent agent was, a few years ago, tried in various lunatic establishments, but the report of its operation I found singularly to differ. The only person who spoke in favour of it was my friend, Dr. Balmanno, the able physician to the Glasgow Asylum. He told me that in furious mania he gave from fifteen to thirty drops of a diluted solution of it, preparatory to exhibiting hyoscyamus or other narcotics. This produced diminution of the pulse, exhaustion, slight twitchings of the muscles of the face, and slight subsultus; and that it was when the patients were in this state that narcotics had a full and good effect.

Upon this information I adopted it, strictly observing Dr. B.'s plan; but I never derived permanent benefit from it in any one case.

17. *Camphor.*

The antimaniacal virtues of this substance have been highly extolled, and some marvellous cures ascribed to it. Modern physicians have little confidence in it. Dr. Haslam says, he gave it in doses as high as two drachms without any sensible good effects. Cox, Hallaran, &c., confess its powers on the circulation; that it first exhilarates and then reduces the pulse, and even, at the same time, acts as a soporific; but neither of these authors attributes a cure to it.

When given in large doses, it has always been considered highly heating and stimulating; to counteract which the old practitioners were wont to combine, as a refrigerant, nitrate of potass with it. In a case of insanity, where two scruples were exhibited, it produced a fit, and a perfect cure followed. When given to the same gentleman two years afterwards, upon a relapse, *i.e.* a recurrence, it had the same effect, even to an alarm-

ing degree; but the patient did not, as before, progressively recover from a single dose, for it was repeated afterwards in smaller doses of ten grains.*

Hence we may learn how far camphor can be prescribed as a remedy in the treatment of insanity. In rash hands it may prove dangerous to life, and in the most dexterous can rarely be used to advantage. If ever admissible by itself, it would be where, as in some long-standing cases, the system is extenuated and feeble, and requires stimulating.† In combination with certain sedatives, however, especially henbane, it has proved beneficial.

18. *Spirit of Turpentine.*

Very few remedies are mentioned as having been tried in that worst of all forms of insanity, maniacal epilepsy.

Dr. Edward Percival, of Dublin, deserves much commendation for turning his attention to its cure. With that view he has strongly recommended the rectified oil of turpentine. He tried it in long-standing cases which were deemed incurable; and although he was unable in a single instance to banish permanently the epileptic attacks, yet in every instance they became considerably milder, less frequent, and remarkably disengaged from the maniacal excitement which had before attended

* Lond. Med. Journal, vol. vi. p. 120.

† The experiments which MM. Bergogue and Gallois made upon themselves with camphor, if correct, ought to set the question of its effects on the human system at rest. They proved that twelve grains produced symptoms of the highest vascular and cerebral excitement, and increase of muscular powers; and that by weakening themselves by first taking evacuants, they were always able to repair their state by taking fifteen grains of camphor: finally, they conclude, that nitre joined to camphor does not at all abate its stimulating properties; and that when heaviness succeeds the taking of opium, or any other narcotic, the means of removing the torpor are, to employ camphor, which necessarily produces excitement.—*Journ. Gén. de Méd.* tom. lvii.

them. He employed this remedy in twenty cases, — thirteen women and seven men, — and in each case persisted in its use four months.

The formula Dr. Percival adopted was an emulsion, prepared by triturating an ounce of rectified oil of turpentine with as much loaf sugar, adding very gradually a pint of spearmint water. Of this mixture he gave an ounce thrice a day, as a full dose. He remarks, that the women bore the largest doses of it without experiencing catharsis, and that to them it also proved soporific, which was not observed in any of the men's cases.*

From this physician's account, I was induced to try his prescription in three cases of this hopeless malady ; but it produced no good effect, and I therefore desisted from its use.

Dr. Knight† boasts of unheard-of success in treating maniacal epilepsy ; and he asserts that, among other means, he freely used the spiritus terebinth. rect. as recommended by Dr. Percival, with much benefit.‡

19. *Tonics.*

Tonics of all kinds are admirable adjuvants in the cure of insanity ; but if administered in recent cases, before vascular action and excitation are abated, they may be decidedly injurious.

It is not enough to prepare for the exhibition of tonics by vomiting and purging, but the accelerated circulation and cerebral irritation, indicated by the symptoms I have described, must first be lessened by moderate local bleedings, refrigeration, and other remedies which have power

* Dublin Hos. Rep. vol. i. p. 116.

† Gratified by Dr. Knight's success in this intractable disease, I requested a more explicit account of his mode of treating it ; but I was sorry to learn that the experience of the medical officers of the Lancaster Asylum refuted Dr. K.'s statements.

‡ Observ. on Derangement of the Mind, p. 65.

over the action of the heart and arteries, either by equalising or retarding their impetus.

This course seems to be now generally pursued by most judicious practitioners before they prescribe tonics in maniacal cases.

Medicines of this class are, more or less, stimulants, and are permanent in their effect. They cannot, therefore, be applicable where there is already strong evidence of existing stimulation, and consequent inordinate action, as in the incipient and confirmed stages of mania. Yet even in this state the immediate exhibition of the cinchona, and of wine also, merely preceded by clearing of the bowels, have been recommended by those reputed to have had great success in the treatment of insanity.

This practice is founded on the impression that insanity is a disease of debility of the nervous and vital principles.

It is avowed by Dr. F. Willis to have been the principle of his grandfather's and uncle's plan of treatment, and he himself therefore recommends, in every stage of mania, a tonic and stimulating system. In support of it, he maintains that every lunatic in a violent paroxysm is in imminent danger of life from consequent exhaustion, and must be sustained by the means of stimuli. I admit with him, that there is more danger of a state of exhaustion following that of violence than has been generally supposed; and that, therefore, depletion ought to be cautiously pursued; but I differ from Dr. Willis in thinking that life is frequently extinguished from the mere violence exerted by the patient, unless previously extenuated by long continuance of this or some other malady, or by injudicious depletion. If life be extinguished in the early stages of a maniacal attack, it more often happens from inordinate excitation; and this state would certainly be heightened by stimulants.

The imminent danger of pushing depletion to an

extreme in recent cases, is not so much in regard to life as to a very protracted case, or permanent insanity; and if depletion be adopted in an old case, the chances are, that complete fatuity, or, indeed, premature death, will ensue.

Dr. F. Willis adduces a solitary case in support of his theory and stimulating and bracing practice, which is that of a young lady, who for six days from the accession of mania, and before he saw her, was very violent, and had been bled by leeches applied to her forehead and temples, and by cupping-glasses to the back of her neck. She had also had a blister on her head, been purged, and was only allowed barley-water, with weak broth. He adds, that she had ceased to rave, probably from exhaustion. She was sleepless, silent, and in perpetual motion; pulse 130, and all the symptoms of cerebral excitation; unconscious of evacuations; tongue brown; lips and teeth covered with sordes. Dr. F. W. inferred, that although there might be some disease in the brain, either congestion of blood or effusion of serum, yet the patient was necessarily worn out, and her life in danger. Under this impression, he gave her immediately two glasses of old port wine; and two hours afterwards, three ounces of decoction of bark, with some of the tincture, as the only means of saving her life. By these remedies her vital powers were quickly restored, and she soon answered questions correctly.*

The practice described in this case antecedent to Dr. F. Willis being called in, is that which I have too often met with, and cannot too strongly reprobate. It is applicable solely to high inflammatory action, and would unquestionably in this case have terminated in death or permanent loss of reason.

In a case similarly treated, I should certainly have

* *Suprà cit.* p. 116 et seq.

advised the cessation of a depletory and antiphlogistic plan, and substituted cordials and nutriment, and endeavoured to have raised the strength, regardless of the mental symptoms. But although the depleting and lowering system had been carried in this instance to an unjustifiable extent, yet a suggestion may arise, whether wine and bark, when Dr. F. Willis prescribed it, would have succeeded in producing such good effects, unless preceded by evacuants. In fact, the patient was prepared, by the system which had been pursued, though at too great a risk, for the exhibition of stimulating remedies; and hence, probably, the speedy recovery.

Some time ago, during a hot midsummer, I met Dr. Armstrong in consultation, on the case of a stout and athletic gentleman in a state of violent mania. A physician, who had been called in a few days before, had prescribed the stimulant plan, and allowed port wine and beef steaks for the patient's diet. He grew furious, to a degree beyond any one I almost ever saw, and was in a perfect delirium. After the first visit, he came solely under my care. The treatment was reversed in every respect: he was first removed from home, his head was shaved, sixteen ounces of blood abstracted from the occiput and temples by cupping, refrigerating lotions were applied, purging, and afterwards nauseating doses of antimony given, and a spare diet enjoined. In a few days he was infinitely calmer. When the symptoms of excitation were gone off, he took a bitter infusion with aperients; finally, bark, wine, and abundant nourishment. In about two months his reason was restored, and in three weeks more he went to Brighton, where he stopped two months, and then returned home quite well.

In recent cases of mania, so long as there exists symptoms of determination of blood to the head and cerebral congestion, with a flushed countenance, hot scalp, and shining and suffused eyes, I would advise the postpone-

ment of all tonics and stimulants. Quickness of pulse is no criterion, as it is often temporary, and the effect of transient causes or of simple irritation. Hence the pulse, in respect to tone rather than celerity, is to be regarded.

In melancholia, we often find much cerebral excitation and occasional fits of violence. Even here I do not advise powerful tonics to be exhibited while these symptoms continue. But as soon as the vascular excitement is subdued in either case, and the nervous system chiefly seems affected, I confidently commence tonics; first, the lighter, as gentian, calumbo, cascarilla; and then cinchona, combined often with nitric acid, the sulphate of quinine, iron, &c., with the cold plunging or shower-bath, strong exercise, and a generous diet, and wine, ale, or porter, in moderate quantities, according to the patient's constitution, or original habits.

When the digestive organs are much disordered, which they generally are in melancholia, I add two or three grains of blue pill, with one of ipecacuanha, at bed-time.

Arsenic is also recommended as a potent tonic; but I have never tried it in any case of insanity, since there are abundance of others on which we may rely, and with more safety.

20. *Tobacco.*

Mad people generally experience some change in the senses of smell and taste; sometimes they are insensible to the most offensive odours; sometimes they are sensible only to those which are very pungent. The most universally agreeable substance to them is tobacco, whether to smell, chew, or smoke. There are some whom in any of these ways it renders more tranquil; and in lunatic establishments it is often found to be a ready means of conciliating good-will and confidence. The melancholy and imbecile seem fondest of this indulgence.

Possibly, the insane find the same pleasing stimulus from the use of tobacco generally as the man of deep reflection experiences in his study, or the wit in conversation, from a pinch of snuff.

Dr. J. Cheyne ranks the use of tobacco among the causes of apoplexy, and quotes Cullen's opinion, that the taking of snuff produces this effect, as well as premature senility.* From the close analogy between the apoplectic and maniacal diatheses, and the frequent terminations of one in the other, I should conclude that generally the use of tobacco in any form is injurious to the insane. Mr. Nesse Hill says, that the insane have no evacuation from that great emunctory of the head, the nose, there being no secretion from the Schneiderian membrane. If this were universally so, the pungency of snuff would be desired by all insane patients; but many are averse to it. Esquirol encourages smoking and chewing tobacco in his private establishment, in the hope of advancing a favourable crisis by inducing ptyalism. Maniacs, he observes, have often very dry mouths and make efforts to spit, and therefore this secretion ought to be promoted.

It is, however, to be objected, that ptyalism may either be the effect of a bad habit, or, as it is a frequent accompanying symptom in mania and melancholia, be the effect of too great excitation from determination of blood to the vessels of the head. Here, in either case, tobacco may prove detrimental.

That it is ever serviceable, I think very problematical; except as a means of keeping some patients more tranquil.

Were any instance ever proved of a crisis being produced by salivation, smoking might be encouraged; but as I know of none, and see no utility to compensate posi-

* On Apoplexy and Lethargy, p. 150.

tive inconveniences, I never encourage it. Where it has become a habit, and the interruption of it occasions great irascibility, some indulgence must be shewn; but the sooner it is broken off the better. A little management will accomplish this in those lunatics most inveterately addicted to snuff-taking or smoking.

21. *Diet.*

Diet is a very material part in the treatment of the insane. The appetite of most is capricious. Sometimes it is voracious, sometimes defective. Both extremes are owing to a morbid state of the digestive functions. In some hunger is mere animal instinct, and there is no regard either to quantity or quality; in others the appetite is depraved, and they will substitute the most nauseous and disgusting matter for wholesome food. These different conditions are always obvious, and the manner of treating them is equally so.

When the case will not admit of stimulation, as in most recent cases, the diet must be light and spare. But when a strengthening system is indicated, it should still be light, but more nutritive. In melancholia and hypochondriasis, dyspepsia is common, and then the diet should be the same as in any case unconnected with mental affection.

One caution is exceedingly necessary in respect to the state of insane persons. Mere violence and vociferation, however unceasing, must not be mistaken for the excitation of active insanity. These are oftener the concomitants of old and permanent than recent madness; and spare and scanty food would increase restlessness, fury, and raving. Many in this wretched condition are troubled with devouring hunger, which augments their rage. Good and substantial food, with a little wine, or porter especially, satisfies this craving, causes a greater flow of blood to the brain, where in such cases it is generally

deficient, induces sleep, and renders their whole conduct more quiescent and tractable. Some deemed incurable have recovered by a change from a poor and insufficient to a generous diet.

The sad effects of reducing the quantity of food, both on the moral and physical condition of the lunatics in the Bicêtre and La Salpêtrière, in the first years of the French revolution, is feelingly depicted by Pinel;* and that which affected all the lunatics in the French hospitals, applies with equal force to individuals in any situation.

22. *Resistance of Food.*

When lunatics refuse food, it is not only attended with great trouble, but often with danger of their sinking. Their motives for rejecting it, being influenced by their peculiar hallucination, are very various; and the difficulty of overcoming them corresponds.

If prompted by a resolution of suicide, or a fanatical determination to emulate martyrdom, or from fear of offending the Deity, nothing but force can make them take food. Dread of poison produces almost as firm a resolution; but it will give way occasionally, if the patient can procure food in a manner he thinks free from the suspicion of it. The lunatic more easily yields when he refuses from a mere whimsical distaste, which often pervades. He will then, if he relent, often make a compromise to have certain things, and in his own way; and frequently he will consent rather than be forced.

If the expedients which I have advised (p. 463) will not induce a patient to eat, and the period of fasting appears to have gone as far as can in safety be permitted, there is no alternative but introducing food by stratagem or some mechanical means.

* *Traité*, &c. p. 232.

Various instruments have been devised, and some good practical hints offered by different authors, how food is best to be got down. I have seen liquid nutriment introduced into the stomach most readily by means of the stomach-pump: passing its hollow elastic tube through a nostril is a more ready mode than forcibly separating the jaws.

Much nourishment may also be conveyed by the medium of glysters.

Whenever any means are made use of to convey food by force into the stomach, it ought never to be left to the sole execution of an ignorant person. Patients have been choked in the attempt; and even with the utmost care, some injury is often inflicted. Consequently, it is obvious that such operations should never be executed except in the presence of a superior and responsible person.

Practice gives to some attendants on the insane a wonderful dexterity in getting down food. They should be especially resorted to, when it is possible, for this particular purpose.

I shall add one admonition — never to intermix medicines with the food of an insane person. This naturally strengthens the suspicion of poison, or mere disgust of nutriment, and his resolution to resist taking any.

COMMENTARY IV.

MORAL TREATMENT.

IF the moderns have any claims to pre-eminence in the cure of insanity, it is certainly from studying those means which have been denominated moral, with more attention, and applying them with most effect.

The tact of the physician, however, is, in this particular, the pivot on which every thing moves. It is an art, in fact, that cannot be taught. The qualifications are intuitive, not acquired: they may be elicited by accident, and then can only be perfected by experience.

To Pinel, among the moderns, is due the great praise of first adopting that moral system of treating the insane, which has contributed most essentially to the amelioration of their condition, and consequently to the increase of the number of recoveries. This celebrated physician's suggestions have been successfully practised, not only by his immediate pupils, Esquirol, Georget, and other eminent French physicians, but by those of Europe generally.

Although specific rules cannot be laid down for the moral management of the insane, yet a few general principles are recognised,* which embrace almost the essence of this department of the curative treatment, and which, if adhered to, must be conducive to that object. These are :—

First, Never to exercise the mind of an insane person in the sense of his delirium.

* Georget, p. 280.

Second, Never to openly oppose the morbid ideas, affections, or inclinations of the insane.

Third, which is a consequence of the two preceding, to give rise, by diversity of impressions, to new ideas and feelings; and thus, by exciting fresh moral emotions, revive the dormant faculties.

Fourth, Never to commit one's self to an insane person by a promise; but if inadvertently a promise be given, faithfully to adhere to it, unless certain that the fulfilment will be attended with worse consequences than the breach of it.

These principles are not for the government solely of the physician, but of every one who has the charge, or is attending on, or visits casually, a lunatic.

There is no stage of insanity where moral treatment has so beneficial an influence as in that of convalescence.

The approach to convalescence from every species of insanity, is an event of no less delicacy than interest to a philosophic and humane mind. No stage of the malady requires so much judgment, whether it be in detecting the first signs of dawning reason, or in encouraging the efforts of a mind struggling to enfranchise itself from thralldom.

The first indications of convalescence in most diseases are obscure, and none but the experienced perceive them. But, when perceived, frequently little else is requisite than to assist the efforts of nature. In many cases, however, much higher qualifications, and much greater caution, are required to conduct a convalescent mind to a completely sane state. A common mind demands but common care and patience; but a naturally fine and well-cultivated mind requires tact, delicacy, and discrimination, to lead it from the chaos and darkness of insanity to the order and light of intelligence. The first glimmer of returning reason, when unfolded, will be cherished and encouraged by the feeling and judicious. These are too

often neglected, or perhaps heedlessly checked, by the indifferent and ignorant. Hence, recovery is procrastinated, if the chance which such sign presents be not altogether destroyed.

The qualifications of the physician are infinitely more severely tried in conducting convalescence to perfect health, than in the curative treatment of active insanity. He has not only to exercise a sound judgment, to encourage every dawning sign of returning sense, and to reason with his patient, (for reasoning now is highly useful in removing weakened and decaying illusions,) but he must add the soothing voice of friendship to calm the agony which reminiscence often generates. He must also have to repress the patient's impatience to be freed from restraint; to contend with and remove the suspicion and want of confidence, which his cautious course usually produces in the relations and friends, and which, if not steadily resisted, endanger the approaching recovery of his patient, for whom he has thus far and most anxiously employed his skill, time, and attention.

“There is a stage,” says an eloquent writer,* “approaching convalescence, in which the bodily disease is loosening its hold over the mental faculties, and in which the latter are capable of being drawn out of the former by judicious appeals to the mind.”

No sooner is this bodily disease seen to be loosening its attachments by an evident amendment in the physical condition of a lunatic, than the most careful scrutiny should follow, to detect a ray of returning reason. The one generally follows the other as the effect the cause. If, with the improvement of bodily health none be discovered in the mind, it is a bad omen, and the probability of recovery proportionably diminishes.

At this critical point it is, that the art and judgment

* Dr. Gooch.

of the physician and his assistants are especially called for. And at this critical point it is, that the ignorant and the rash fail, and too often replunge the hapless convalescent into irremediable insanity.

The return to health, however, like the access of insanity, may be sudden, or it may be as gradual as the development of the symptoms which preceded it. When sanity is suddenly restored, its stability is more doubtful than when gradually attained.

In the worst cases, where the patient has been lost to every object that would naturally engage the attention of a sane mind, the symptom first indicative of returning reason is, perhaps, some sense of the decencies of life, or the dropping, as it were by chance, of some apposite remark, or the asking of some pertinent question, though with the hesitation of one in doubt, in respect to his own situation, or that of his family. Any particular delusion that has been cherished becomes less prominent, and is not so obstinately defended. Reasoning then begins to have greater effect. Sometimes the approaching convalescence is announced by the gradual revival of the moral affections, and associated with these recollections, the feelings are often moved to tears. No augury is more favourable than when such emotions are evinced. All these motions of the mind and of the moral affection, are at first feeble, and perhaps transitory. They should be encouraged; but these efforts of returning reflection and reason must be guided with a gentle and imperceptible hand. No errors which the patient may commit of memory or speech ought to be noticed, lest, if exposed too suddenly, they shock and discourage him. If, in reasoning with him on any remaining delusion, a painful recollection is revived, the subject should be changed, and resumed at another time.

So in respect to returning moral affections. The inquiries to which this happy condition leads must be

frankly, but cautiously, answered. If any domestic event have occurred during the abstraction of the patient's mind, likely to excite a strong feeling, whether of joy or grief, it must be withheld, and not be imparted till the understanding is supposed to have acquired strength to bear it; and even then, caution in the communication is prudence.

Where nothing extraordinary has happened, the anxiety dictating a question should be promptly satisfied, in order that it may be quickly removed; but the answer should be limited to the simple solution of the question. The very flood of reminiscences endangers the safety of a mind enfeebled by disease, and struggling to recover possession of its faculties. It is, therefore, one of the most important as well as delicate tasks, in communicating with a convalescent relative to the past or present, to preserve a due medium between gratifying and checking his eager importunities for information.

It is a common opinion, that because the mind is deranged, the memory must consequently be suspended. This does not follow, but I think the memory is more often impaired than is generally suspected. Lunatics commonly recognise with facility. But recognition, and recollection which is an effort of memory, differ: Aristotle made this distinction: beasts and babies recognise; man alone remembers, *i. e.* recollects. Man, in a state of mental derangement, is degraded from his rank, and approximates nearer to the brute or the baby; and it is the faculty of recognition which he then exercises, more often than memory.

We certainly find in the convalescent, that the recollection of the past is very diversely affected.

To some, the retrospect is a perfect blank; others remember the past like a dream; others all the realities of it. Some will refer to it with indifference; others advert to it with boundless gratitude for their recovery; others

again recall it with pain and abhorrence, and studiously avoid all reference to person, place, or circumstance, connected with it. Whatever be the impression, it will be very apparent in the convalescent, and our conversation with him must conform to it.

The following is a singular case, and illustrates the latter disposition: —

A married lady, aged about forty-seven, of a highly respectable family, and of a most intelligent mind, but of excessively nervous susceptibility, had for some time evinced a very unequal degree of spirits, and conceived unfounded jealousies against some connexions for whom before she had always shewn great regard. For her husband and children, however, her affection was still unbounded. At length her irritability and violence were so great, that she was removed to a friend's house at a distance. In about three weeks delirium was developed, and she became so unmanageable there that she was brought to town and placed under my care. I learnt, that about fourteen years before she married she had been seized with sudden mania. She then resided in the Highlands of Scotland, and being several miles from medical assistance, her guardian, with whom she lived, put her under that degree of restraint only which was necessary for her safety till advice could be procured. Although before, she entertained the greatest and even filial regard for this gentleman, she never afterwards could endure the sight of him, and even twenty years subsequently, when she met him in a room by accident, she was horror-struck at the rencontre.

I placed her in a ready-furnished house, with proper attendants, and separated her from her friends. Her own maid, a most respectable woman, who had lived with her many years, was appointed to manage the household, but was strictly enjoined never, on any account, to interfere or communicate with her mistress — an order which she

strictly obeyed. The case appeared to me, from the patient's critical age, to originate in uterine irritation. She was exceedingly joyous; laughing, singing, and talking incessantly; and with all, childishly mischievous.

Very little personal restraint was required in managing her, though the strait waistcoat had occasionally been lightly applied, to prevent the consequences of her mischievous propensities. She always received my visits with apparent satisfaction, and seemed pleased with her two nurses. She very rapidly improved. Suddenly, about a fortnight from my first visit, I was surprised to find her manner wholly changed towards me, and also towards one of the nurses. Now she treated me with great hauteur and scorn, and would answer none of my questions, and behaved with marked ill-will towards that nurse who had restrained her. At first I thought this a new feature in the malady. But finding that she was otherwise perfectly consistent in all her actions, in her conversation to the favoured nurse, and likewise in her expressions in a letter which I permitted her to write to a friend, I was in doubt how to interpret such conduct.

Upon mentioning this behaviour to her husband, he then for the first time told me of her singular aversion to her guardian upon her first recovery, and the occasion for it. Recollecting that it was to the nurse who had restrained her the dislike was manifested, as well as to me, by whom she might suppose the orders so to act were given, I immediately concluded that my patient was moved by the same feeling towards both me and the nurse as she had been towards her guardian; and therefore that she was really convalescent, and not influenced by a new delusion.

I soon put this conclusion to the test. I told her that I felt much at a loss in what light to view her present conduct: if she had happily recovered her senses, she must be conscious that I had paid every attention,

imposed no unnecessary restriction, and in a very short time had, I flattered myself, been instrumental to her recovery, and that she had made no complaint of any harshness being shewn by the attendants. The proof, therefore, I expected of her being convalescent, would rather be an expression of gratitude for my services than of contempt and silence; and I regretted that I must report to her family that the disorder had taken a new and more hopeless character.

The next visit I paid she received me with the greatest courtesy, apologised for her former conduct, saying it arose from a misapprehension of my character and intentions, and professed the most perfect confidence and submission to my future directions. To the nurse also she altered her address. This convinced me that I was right in my conjecture, and that in fact she was convalescent, but influenced by the same feeling towards me as evinced to her guardian. To shew my confidence, however, I dismissed the obnoxious nurse, and gave her more latitude. She took no particular notice of the nurse's discharge, but I saw the secret satisfaction it produced. In a few days I permitted her to write to her husband, and in another week to see him. She shortly returned to her friends in the country with the other nurse, who left her in a month perfectly well.

But the result proved that her conciliatory manners were merely assumed, upon finding that the contrary would expose her to the hazard of being still considered insane; for, as soon as at liberty, she shewed resentment not only to me and the nurse, but also to her old, faithful, and unoffending servant, whom she discharged, though she had merely superintended the housekeeping in compliance with her master's orders. And this lady has ever since displayed the same repugnance to all concerned in the care of her.

This feeling, under similar circumstances, though rare,

is not unique. I must confess, however, were I to be judicially examined touching the state of a mind exhibiting this singular obliquity, I should be inclined to pronounce it unsound. For, assuredly, it is a proof not only of morbid moral feeling, but also of a morbid understanding. Certainly, a mind so constituted can never be safe?

Locke mentions a friend of his who was cured of madness by a very harsh and offensive operation, and who always expressed a deep sense of gratitude for the cure, as the greatest obligation he could have received; yet could never afterwards bear the sight of the operator: the association of ideas brought back, when he saw him, the remembrance of what he suffered, in a manner too intolerable to be endured.* This impression, under the circumstances here alluded to, does not appear a morbid but a too sensitive feeling. But I have known this association of ideas carried much farther, and an utter abhorrence usurp the place which gratitude ought to have maintained, for all those who had been instrumental in restoring a patient to a sane state, and the beloved society of his family; and even in a case, too, where nothing but kindness was shewn, and no personal restraint whatever exercised during the progress of the cure.

When such, however, is the result, it may be suspected that there remains a ready susceptibility to a recurrence of the malady.

If a physician ever deserve gratitude and respect, it is he to whom the charge and medical care of a lunatic is committed, and who faithfully discharges his trust. In no other case is equal confidence placed in him, or so much responsibility imposed upon him. For months, sometimes years, all the best feelings of human nature may be exercised for a lunatic's protection and advantage; and at length, when, by his physician's perseverance, skill,

* On Human Underst. book xi. c. 33.

and humane care, the patient is happily restored to himself, his family, property, and all that man holds dear in this world, perhaps he receives nothing but cold thanks, neglect, and oblivion.

It is very satisfactory when we can discover that a delusion is diminishing its attachments: it marks convalescence. And if the delusion pass away, and no new one occupy its place, and the patient himself acknowledge that it was a delusion, it is an unerring sign of recovery, and confidence may be placed in him.

Cunning, however, being the characteristic of madness, we must be on our guard lest we be imposed on. Many are fully aware that if they successfully conceal their delusions they will be pronounced well; and where one delusion only prevails, it is often very difficult, nay sometimes impracticable, to detect it, except by long intercourse, or perhaps by stratagem.*

It is possible for an impression, made previous to perfect mental derangement, to be so firmly retained after recovery, as to have the semblance of a delusion, and yet be none. One who has no recollection of what has intervened between the accession of mania and recovery, may reckon a circumstance of long-past date as occurring yesterday, taking no account of the interim; and reasoning and acting upon this conviction, he might still be

* I was once involved in a prosecution for a conspiracy, with several others, by a lady, for having received her into my establishment and detained her there. She pleaded that she had never been insane. Although sufficiently deranged on many points to justify her detention, yet it is a fact, that during the nine months she was in the house, she so effectually concealed the specific delusion that occasioned the outrageous conduct for which she was obliged to be confined, that she imposed on all her friends, and they released her. It was proved on the trial, on examining the friend who took her away, that before the patient had passed my garden-wall, she manifested the existence of the identical original delusion in an alarming manner.

thought insane. Dr. Haslam mentions an instance of this kind. A man just recovered pertinaciously insisted he had seen the corn sown as he passed certain fields, and that on returning *three* or *four* days afterwards the same way, it had ripened, and he found men reaping it. He acknowledged this was an uncommon circumstance, but he was convinced of its reality. The fact was, that when first attacked, and he passed these fields, they were being sown; when next he saw them they were being reaped, and he had no recollection of the interval during which he had been insane.

Unless apprised of these various anomalies and states of intellect in the convalescent, we might be led to false inferences, and misdirect our efforts to recover him.

To reason with a lunatic is folly; to oppose or deny his hallucinations is worse, because it is sure to exasperate. If we wish to make an impression on him, it must be by talking *at*, not *to* him. Though he will not listen to what we address to him, yet he will notice what is said to others, and, if applicable at all, will apply the argument or point of your observation more forcibly to his own situation or delusions than we can.

To convince them, or break the catenation of their morbid ideas by fraud, trick, terror, or surprise, is always attended with hazard. The chances are great that it will not succeed; and if it fail, the case is inevitably rendered more intractable; and perhaps the painful reflection is left, that our own imprudent and precipitate conduct prevented the recovery which patience might have insured.

Authors relate cases where this sort of hap-hazard practice has succeeded, and they justify it on the ground that desperate diseases require desperate remedies. But as I never could forgive myself were I frustrated in such an experiment; and as I think the proportion of cures in cases of insanity are as numerous, or more so, than in

many active diseases, I shall proceed in that cautious course which experience has satisfied me is to be preferred.

The confidence of his patients is the sure basis of the physician's success ; and among none is it more essential than with lunatics. A cheerful, encouraging, and friendly address ; kind, but firm manners ; to be patient to hear, but cautiously prudent in answering ; never making a promise that cannot safely be performed, and when made never to break it ; to be vigilant and decided ; prompt to control when necessary, and willing, but cautious in removing it, when once imposed ;—these are qualities which will always acquire the good-will and respect of lunatics, and a command over them that will accomplish what force can never attain.

The state of the insane in respect to moral management, has been rightly divided into active and passive. These opposite states necessarily require different treatment. In one state, moral remedies are almost useless ; restraint and medical discipline must be applied till violence is subdued ; in the other, restraint is never necessary except there be a propensity to suicide, or to habits which are injurious or improper.

Vigilance is necessary in all cases, for the passive state in a moment sometimes changes to the active ; and therefore, unless always on the guard, mischief is done before it can be prevented.

Time displays all a patient's delusions and peculiarities. If he be subject to intermitting or periodical insanity, he requires the more caution, lest a paroxysm suddenly occur. In many, certain symptoms, or a peculiar cast of features, indicate the threatened attack ; but in others it comes on without warning, and much confusion ensues before sufficient restraint can be imposed.

An unhappy solitary vice, to which I have referred as so frequently inducing mental derangement, requires peculiar and unwearied vigilance.

When this is a habit continued beyond the period of adolescence, it is extremely difficult to eradicate. Numerous, indeed, are the cases of insanity arising from this cause. However strong the mental powers of the patients may originally have been, or however forcible reflection on the consequences, yet few can ever be broken of the practice. Sexual intercourse, as a preventive, does not always cure the propensity. Often, the virile powers are too enfeebled to be exercised in this way; but even when there is sufficient vigour, and the act has been completed and repeated, it does not always stop a recurrence to this odious vice. If it be a habit contracted only during the continuance of insanity, it ceases generally with a return to reason.

To prevent the commission of the act by restraint, is extremely difficult, and yet it is imperative to impose it. A thousand subtle expedients will be resorted to, to accomplish the purpose. To prevent it effectually, the patient must never be left alone one instant; and even though a strait waistcoat be worn, and the hands be secured, such confinement only will be unavailing when in bed. Constraint, so that he cannot turn himself, is necessary; and some mechanical contrivance must be applied to guard against friction. The ancients were supposed to employ infibulation, as much with a view to prevent this practice in youth as too early intercourse.

Religious Communication.

The effect on the insane of religious communication is a question at present much occupying the attention of those who have a sincere interest in their welfare.

If religion, under any circumstances, be, as I allege, sometimes a cause of insanity, the result of an error in judgment in the application of it to a lunatic, as a means of cure or of consolation, may be readily appreciated.

That religious instruction of the insane should have

been proposed does infinite credit to the piety and good intentions of those in whom the design originated. But, however correct theoretically, it can never be admitted practically, as a general principle. Although indelibly impressed with the efficacy of religious communication in particular cases, yet, I am equally so, that in others it is highly inimical. In truth, the attempt would often be a mockery of religion, and a gross impiety.

The effect of divine service, according to the usual forms, with a sermon, has been tried on the patients in Bethlem Hospital, the Glasgow, Lancaster, and other lunatic asylums, and spoken of favourably. But then a judicious selection is made of the patients, and discourses suitable to their state are delivered.

Governed by these rules, I have never experienced any ill, but, on the contrary, much good effect, by a proper attention to religious observances among the patients of my own establishment.

The design of affording the aids of religion to the relief of persons mentally deranged is by no means novel. In 1677 there was a chaplain to Bethlem, whose office was “to visit the lunatics, and to instruct and pray with such of them *as are capable of it*” — a distinction certainly most wise. As if impressed with the extreme delicacy of the function he had to perform, the order ran, that he “be desired to compose and make such formes of prayers as he shall conceive most fitting for the said lunatickes.” When the services of the chaplain were dispensed with, and whether his discontinuance was for reasons which would reflect light on the result of his labours, does not appear.

The celebrated Howard, in his account of Bethlem and St. Luke’s, speaks of the advantages of a chapel *for the recovery of patients* in those hospitals, having seen like appendages to similar institutions he had visited abroad. But it is probable that this philanthropist was

more struck with the pious intention, than really informed of the specific effects of religious worship on the insane.

In the York Retreat, “the mild but powerful influence of the precepts of our holy religion,” the judicious Tuke remarks, “where these have been strongly imbued in early life, become little less than principles of our nature; and their restraining power is frequently felt, even under the delirious excitement of insanity.” This is true; but then those precepts must be unalloyed by polemical dissensions. Such a religion will neither disturb the passions, nor rouse those particular associations often latent in the minds of lunatics. Besides, at the religious meetings in the York Retreat, the service is confined, generally, to the superintendent’s reading a few select chapters in the Bible. The pains taken also in that institution to be previously and fully acquainted with the disposition of every patient and the nature of his insanity, preclude the hazard of doing harm.

Before religious instruction in any form be attempted, let it be received as a maxim, that an intimate knowledge of every patient’s state of mind, and of his former and present opinions regarding religion, should be first ascertained; and till all doubt on this head be removed, every interference should be suspended. This information, among a great number, is difficult to obtain. Even when obtained, the admissibility of this powerful auxiliary, in assuaging the anguish of a troubled mind, and aiding the recovery of convalescent lunatics, must be left to the judgment of the physician; but, above all, if in an asylum, to the accuracy of the superintendent’s discriminating faculties. Hence it is easy to conceive how great an adept he ought to be in fathoming the recesses of the human mind.

No minister, except he have constant intercourse with the patients, and be well acquainted with each, ought to assume this office. Of all the functions he

has to exercise, he will find none requiring so much tact and discretion as that of administering spiritual advice to the inmates of a mad-house.

Is it not clear that the spiritual admonitions which may be adapted to one lunatic, may be a source of irritation to another? For where men who are called sane are so exceedingly tenacious about the mere forms and ceremonies of worship, and are thence impelled to acts little short of madness, how can we imagine, that among a number, some insane, some weak of intellect, and some convalescent, offence should not be taken, if the doctrine or rites most consonant with each patient's notions be not preferred? Without, therefore, the utmost precaution, it is not difficult to determine, that the introduction of spiritual subjects must be dangerous and often injurious.

The great mischief which certain fanatical preachers occasion to the weak and superstitious, is not simply in the mysticism of the doctrine they advance, though often in itself sufficient to confound the uninformed minds of those to whom it is generally addressed; but without distinction, it conveys alike to the innocent and gentle, as to the wicked and callous, the image of a SUPREME DEITY jealous and full of wrath and vengeance. For the pious there is no hope—for the guilty no salvation, even through repentance. Hence terror and alarm, instead of confidence and hope, are inspired, and despair follows. To such a motley congregation as a public lunatic asylum will present, it is still more necessary that the doctrine promulgated should be modified to meet the varied feelings and mental conditions of the congregation, otherwise the aggravation of some cases is inevitable.

There are, doubtless, many lunatics to whom religious instruction would be extremely useful, if it were adapted to their peculiar case, but who, as attendants on the

ordinary forms of worship, could not avoid hearing matters which might give birth to some dormant feeling, and thus derange whatever harmony of mind they had attained. There was a well-known case in point. A gallant officer, who was long confined as a lunatic, and then liberated, exercised afterwards with great propriety all the functions of a magistrate and a good citizen; but on hearing a certain and essential part of the church-service read, a particular hallucination revived, and his reason then aberrated. Had he been often exposed to this excitement, he would, probably, have been permanently insane. This case is far from being a solitary one. It is plain, therefore, that religious instruction, when attempted, ought generally to be administered separately, through the medium of private communication.

Zealots seem to have imbibed an opinion, that religion can supersede reason, and that the percipient faculties can never be so obscured as to intercept spiritual lights: therefore they will never be persuaded, that religious communication can, in any condition of the understanding, prove hurtful, and aggravate the insane. As zealots are commonly bigots, such prejudices are nothing wonderful. But there are many persons certainly of unfeigned piety, and in every thing else of sound judgment, who carry their notions of the efficacy of religion as a remedy in mental derangement, to the most painful and unreasonable lengths. Thus they frequently insist, that the lunatic for whom they are interested shall have free access to religious books, and spiritual communication upon the very points with which his mental aberrations are most clearly connected. Such persons do not consider that the mind of a lunatic is comparable to that of a child, with this difference — in the former, it no longer performs its functions correctly — in the latter, it has not acquired strength sufficient. We would not apply reasoning to appease or correct the fugacities of a child,

because we know his ratiocinative powers are unable to discriminate or appreciate its force. Why, then, should we adopt that course with a lunatic, whose perceptive and reasoning faculties are perhaps alienated ; or, if the powers of perceiving or reasoning remain, they perhaps are so perverted, that he never can be convinced he sees things darkly or erroneously ; and whose arguments, though often correct, are always deduced from wrong premises ?

The most powerful impediment opposed to the cure of mental derangement complicated with religious aberrations is, a false prepossession in the relations of the patient, which too often begets want of confidence in the plan prescribed. Nothing is more common in cases of insanity, than for the advice of the physician to be in a moment superseded by the interference of kind but injudicious friends. As in the examples quoted (Part I. Comm. II.), so, whenever I have been left to follow my own judgment, however deeply the mind was imbued with religious delusions, I have never, in recent cases, found particular difficulty in curing the patient. The contrary opinion, which prevails, strengthens the prejudice already too universally diffused, that “ religious insanity ” is incurable : this, by preventing the application of prompt and energetic means, tends in reality to render it so.

The more thoroughly we examine the subject of religious instruction in relation to lunatics, the more sensibly shall we feel the necessity of deliberate selection. Every experienced physician must have seen cases of insanity in some of the stages of which, perhaps, it might be received with advantage. Every Christian will wish that no opportunity of applying it should be omitted when it presents itself : but were it to be attempted without the nicest discrimination of individual cases, where the understanding of one would be restored many would be irretrievably alienated.

It results, that religious instruction must in the first

instance be tried as an experiment. The only safe way in which it can be essayed is by a previous personal examination of each patient's state of mind and feelings, and if pronounced in a fit frame, there can be no question that the inculcating of the simple and benign precepts of Christianity will not only be found an efficacious auxiliary to the restoration of a sane understanding, but to the subsequent preservation of it. For true religion yields to the afflicted relief, to the sinner hope, to the repentant forgiveness, and to all who possess a sound mind and believe, is "the source of light, and life, and joy, and genial warmth, and plastic energy."

COMMENTARY V.

RESTRAINT.

RESTRAINT is apt to be confounded with coercion. Nothing can be more dissimilar. The one is an efficacious remedy, the other an aggravating torment. There is just as much difference between them as there is between morality and immorality.

Cælius Aurelianus, whose treatment of the insane does as much credit to his heart as to his head, accuses the sect of medical philosophers designated methodists, with treating lunatics with great barbarity. He says, they ordered them to be fed like wild beasts, covered with chains without any discretion, and to be whipped. It must be confessed, that the incomparable Celsus is open to this reproach ; for he expressly orders for his third species of insanity, when a patient says or does any thing amiss, “*fame, vinculis, plagis coërcendus est;*” and, as if this were not harsh enough, terror, fear, and mental perturbation, are to be added.* It is to be suspected that the Celsean rather than the Aurelian plan prevailed even to our own age ; and although happily fast exploding, yet that it is not quite extinct in every part of Europe. We find Thomas Willis† advising, as the first indications in the curative process of mania, manacles, fetters, and stripes, to be equally as necessary as medical remedies. He further recommends that the food should be slender and not over delicate, clothing rough, bed hard, and

* Lib. iii. cap. 18.

† Omnia Opera.

treatment severe and rigid. Those labouring under obstinate madness were rarely submitted to curative means, but were placed in lunatic hospitals, that they might not do mischief to themselves or others. Prescriptions, deceptions, allurements, rewards, and punishments, were to be frequently varied.

Such is the picture presented of the treatment of those afflicted with mania by the “inventor of the nervous system,” (as Friend calls Willis), and the most distinguished anatomist and physician of the seventeenth century. It is evident that this coercive system descended to Willis from the ancients, and had been adopted without reflection or trial of more humane means. Yet in melancholia his moral instructions become the most enlightened period. In that malady he recommends cheerful society, music, singing, dancing, hunting, fishing, pleasant exercise, sights, any light occupation, studying mathematics or chemistry, also travelling, changing the scene, and to abstract the mind by artificial means. In this mild course, however, he was equally an imitator of the ancients as in the severer.

His medical advice, too, considering his astrological and chemical pathology, was appropriate, with the exception of depleting too much, and periodically.

In the course of another century all the good points in Willis’s practice appear to have been forgotten, while the objectionable ones were too faithfully retained.*

* We collect from Morgagni two facts — that maniacs in Italy, a hundred and fifty years ago, were very inhumanly treated, and that he was less acquainted with the nature of the disease than his contemporary, Willis. Although Morgagni did not follow them, yet he could admire and commend the humane precepts of Valsalva in respect to the treatment of the insane. It is curious, but the former eminent Italian physician and pathologist suspected that persons could not be insane because they died of acute disorders during the rigors of winter! — *Epist.* Art. 4 and 5.

In the worst species of lunacy, or even of congenital idiocy, the mind is never so degraded and obtuse as to be incapable of distinguishing between kindness and rigour. Rewards and punishments, as with children, have each responsive effects.

The rotatory chair, the douche, a dark room, and personal confinement, are often used as means of repression. These, and other expedients, so far as mere restraint of violence or malignancy extends, are justifiable and imperative on many occasions. Deprivation of an accustomed indulgence, also, will often check the repetition of a wilful offence. But in employing repression, or constraint, or deprivations, we must always remember the constitution and condition of the patient, and act accordingly.

All these expedients are apt to be construed by the patient into punishments; and if enforced when there is no actual necessity, beget a dread and resistance to them when necessary as remedies, and thus counteract any benefit from them.

Except when the safety of the patient or others demands the immediate interposition of restraint, it should not be hastily adopted; nor should any measure that can be interpreted as a punishment be imposed but by the direction of the physician or superintendent. Most lunatics readily discriminate between the medical character and those in real authority, and the servant or keeper. The lunatic who respects the command of the former, spurns indignantly constraint from the latter.

Every thing pertaining to medicine is ever in extremes. From excessive coercion and neglect of the insane, the opposite extreme is to be dreaded, and thus wholesome restraint be withheld when really required.

The philanthropist alleges that too much coercion is generally used towards the insane. If coercion imply the practice which Celsus and Willis recommend, it ought

not to be endured ; but if it mean no more than simple restraint, to prevent a patient from doing injury to himself or others, or to enable his attendants to control him, I maintain that such restraint is frequently called for, is generally highly useful, and, notwithstanding all that is alleged of lunatics being managed without, cannot altogether be dispensed with.

I have frequently been told, that no restraint is ever used, that is, a strait waistcoat, &c., in the Quakers' Retreat, at York. This is an error, which a perusal of Tuke's "Description," &c. will refute. That excellent man himself shewed me a patient under the strictest restraint I ever saw ; but it was a case of most desperate propensity to suicide, and the confinement was no more than the safety of the patient, and the reputation of the asylum, required.

Those who are unacquainted with the extreme violence of maniacs, and the amazing muscular strength which they are capable of exerting, cannot conceive the contention, struggles, and personal injuries which the patient himself consequently suffers, when prejudice or a false humanity interferes and prevents a proper control being exercised. I have known the patient in these personal conflicts to sustain such serious bruises and lacerations, that, in more than one instance, mortification of the parts, and death, have followed.

To obviate the necessity of bodily restraint by the ordinary means, Dr. Autenrieth constructed a strong room, padded all round, in which he conceived that the most furious lunatic might be let loose, like a beast in a den, without doing harm to himself or any one.* The absurdity and uselessness of such a plan must be apparent

* Those who wish to read Autenrieth's description of this room, and how to manage violent and obstinate lunatics, must consult the *Clinical Annals of Tubingen*, vol. i. part 1. 1807. But I fear the perusal will scarcely compensate the trouble.

to the experienced, who know that some maniacs unrestrained, and so situated, would tear away all padding, and beat their brains out, or soon become beasts in reality.

Solitary confinement is certainly best for the turbulent and vicious. Irritation is thus avoided; and if the patient have any dangerous propensities, proper precautions must be taken.

As light is often a source of great irritation, so darkness is a powerful auxiliary in obtaining quiet, and preventing the renewal of raving. But we should as speedily as possible ascertain that darkness does not beget real terror. Many, besides the ignorant and superstitious, have an unaccountable dread of being left in the dark, and the worst consequences might follow their being so treated.

Shading the eyes, by merely placing a temporary bandage over them, has, while it was on, banished ocular illusions; but if by so doing it is found that its effect is to substitute one illusion for another, no advantage is gained.

I can easily credit that more restraint is often exercised than is absolutely necessary. It is the ready resource of idle keepers; and frequently the subterfuge of parsimony, both in public and private practice, to save the expense of adequate attendance.

Unnecessary restraint has often a very injurious effect, both morally and physically, on the insane. Some minds are of that free and elevated cast, that except alienation be complete, forced control begets a deep sense of degradation. The pride of birth, too, ill brooks control, and will not yield obedience where accustomed to command. A nobleman, or man of fortune, when insane, therefore, is always infinitely more difficult to manage than one of inferior degree.

With such persons we should be particularly circumspect that no control is attempted that can possibly be

avoided. Fortunately they possess in their wealth the means which preclude the necessity for so much personal constraint as may be requisite for the poorer.

Sometimes, however, not all the advantages which wealth and numerous attendants can bestow, will supersede the necessity of rigorous confinement.

I attended a very distressing case of this kind some time ago.—A nobleman, of a fine and cultivated mind, was rather suddenly seized with mania. His delusions induced him to think still higher of his consequence and endowments; added to which, he fancied that he was intrusted with a spiritual commission from God. No persuasion or art could induce him to submit to medical discipline, or any control. Force was at last resorted to, but with all possible caution and respect. It exasperated him violently. The plan was relaxed; but his conduct was wild and dangerous to the highest degree. Constraint was resumed. A continued opposition ensued for three months, when, from wilful abstinence and constant resistance and vituperation, he became quite exhausted, and died. Every thing was done that skill could devise to enlarge the patient's liberty; but it was dangerous even for a minute. I superintended many attempts to relax his confinement, but all was in vain—the consequences were always terrible.

In the midst of his delusions and ravings, offended pride was uppermost. He would never enter into any compromise, but invariably insisted on his liberty as his natural right. The following characteristic colloquy took place with him one day in a consultation:—

One of the physicians urged him to walk in the garden for exercise. “No, sir!” he replied, “I will not, while in this degraded condition!” (glancing at the strait waistcoat). “But, my Lord, no one will see you there.” “Ah, sir! what a base man you must be, to think it is the being seen! No, sir, it is not my

body's degradation: it is my mind that is degraded and suffers!"

After I heard these sentiments, in which there was so much truth and feeling, I redoubled my efforts to obtain his confidence, and a promise that he would conduct himself quietly if I gave him his liberty. I would unhesitatingly have placed confidence in him, had he made that promise, under a full conviction that he might be trusted; but he refused all pledges. Nevertheless, I again gave him more latitude; but he was, as before, dangerously violent, and again restraint was resumed.

No rule can be laid down relative either to the kind or degree of control that should be exercised. No two cases of insanity are alike, nor any two constitutions; therefore this must depend on the judgment of those to whose care the patient is confided.

Many patients solicit due restraint, from the consciousness of an approaching paroxysm, and that they cannot then control themselves.

Humanity has invented a variety of contrivances to restrain insane persons, compatible with their security and health. The strait waistcoat is most commonly used; and provided it fits the shape of the patient, and is properly put on, it is a good safeguard; but it is apt to be drawn so tight across the shoulders, that it brings them forward too much, narrows the capacity of the chest, and impedes respiration. The strings of it also are often fastened too tightly round the arms, so as to check the circulation, and the sleeves are sometimes tied improperly in a knot on the back, so as to gall the patient exceedingly. These are faults rather in those who put them on, than in the waistcoat, and may be obviated by care.

The Glasgow muff is an ingenious and excellent contrivance. It is complained of by the attendants as being difficult of application; but I believe this to be prejudice.

It is now very generally adopted in lunatic asylums on the continent, especially in Italy.

Drs. Hallaran and Knight, in their respective works, have given drawings of several very useful belts, sleeves, &c. for similar purposes.

The similarity of metal manacles to common handcuffs, and the consequent associations of ideas to which they give birth, has raised a very unjust prejudice against the former. The high polish of which iron is susceptible admits of free motion to the wrists, without the friction and consequent excoriation attending on rings made of linen, leather, or any other substance; neither does the patient exhaust himself by attempting to gnaw or tear the one, as he does the other.

A belt of leather, fastened round the waist, with steel or leather manacles, in which the wrists are confined, is useful.

Patients ought never to be left long when under personal confinement of any kind, because they cannot assist themselves. They may suffer from thirst, or any bodily annoyance, or from a call of nature, without the possibility of relieving themselves, except, in the latter case, at the expense of cleanliness and comfort. Hence the necessity of some one always being with patients in confinement cannot be too strongly enforced.

Incontinence of, or indifference to, natural evacuations is often a consequence of the malady in its active as well as in its incurable form. But I am persuaded, a habit of involuntary evacuation of the contents of the bladder and rectum is very often induced by neglect of the wants of the patients. If no one is by to watch their indications or answer their calls, they are compelled to relieve themselves; and thus a habit is acquired, by which the sphincter muscles become relaxed, and eventually refuse their office, even when sufficient sense and volition re-

turn; so that a deplorable evil is sometimes entailed, which common care might have prevented.

None should be actually coerced, except when the intention is to support life or promote a cure. Food and medicine, if refused, and no disguise or stratagem avail, must be forced on the insane. I would suggest trying, before absolute force is used in any case, what persuasion by one of the opposite sex will do. I have often known an insane man, who was outrageous if another man attempted to do any thing for him, yield with the greatest complacency to the orders or entreaties of a female. Delicacy and custom forbid the attendance of men on women, but, for the mere purpose of administering food, the experiment may be made without offence to decency.

However admirable may be the tact and arrangements of the physician in providing and applying the moral means of restoring the insane to health, all is unavailing, unless he is judiciously seconded by able assistants.

There is no class of persons upon whose qualifications and conduct success more depends, than on those of male and female attendants, or keepers or nurses, of lunatics, as they are commonly and respectively designated. Indeed, however experienced the physician, or highly gifted and active the superintendent of an asylum, unless they have able and faithful assistants, all their efforts will be rendered abortive. In private practice, also, when a lunatic is necessarily left without any supervision except that of the visiting physician, it may be conceived how much the comfort and ultimate recovery of the patient are implicated in their good or bad qualities.

The business of an attendant requires him to counteract some of the strongest principles of common nature. Beings so gifted, we know, are too nearly allied to perfection to be found in this class of society. We must, therefore, be content with the attempt to amend those

already engaged in such occupations, or hold out proportionate inducements to persons better qualified to undertake the charge. The moral defects of ordinary attendants have been long felt and deplored as a most serious evil. Besides activity, perfect sobriety, and unremitting vigilance, a keeper should possess a quick apprehension to discern the first approach of a paroxysm, decision, prudence, and the greatest humanity. Now, such qualities do not often meet in one character; and where they do, their possessor can generally find a station equally lucrative, and more agreeable, than the irksome attendance on the insane.

There is no remedy for this great defect in the system of managing the insane but the improving of the moral qualifications and condition of attendants. To accomplish this desideratum, I have on several occasions offered my humble suggestions.* But it is an object which cannot be achieved by individual exertions.

* See Inquiry, &c. p. 255, and Minutes of Evidence of the Select Committee of the House of Peers on Lunatics, p. 115. (1828.)

COMMENTARY VI.

SEPARATION AND SECLUSION.

THERE is no general maxim in the treatment of insanity wherein medical practitioners, ancient or modern, foreign or domestic, are so unanimous as that of separating the patient from all customary associations, his family, and his home; and there is none wherein the advice of the faculty is so commonly and successfully opposed. Thus, cases which in the early stages are comparatively manageable, obedient to medical discipline, and commonly curable, are rendered obstinate, tedious, unnecessarily expensive, and too often incurable. The observant Dr. Heberden, perhaps, goes too far: he remarks, that if insane persons are taken away from their friends and servants at the beginning of the attack, and placed under the care of strangers, that in a short time they recover without any remedies.*

Few of the medical profession require arguments or proof to convince them of the great utility of separation. When the friends of any insane person have a doubt, and have not confidence in the advice or probity of their physician, they should consult the works of authors who have treated of insanity, and who can have no interest in the question. Such friends might then more readily and earlier yield their conviction, and consent to the separation and seclusion of the patient, whenever it is advised by those whom they consult, and think competent to judge.

* De Insaniâ, Comm. cap. 53.

I by no means imply that separation or insulation is indispensable in all cases of mental derangement. I have myself seen patients recover in their domicile; but, comparatively, those instances are rare indeed. The only case where it may be dispensed with, is when the affections are in no way perverted, nor the existing delusions associated with home, or any person or object about it. But even then there are other circumstances to be considered which may prevent recovery while in that situation.

Few persons when they become insane acknowledge being so: consequently, when they find themselves placed under control in their own houses, denied intercourse with their families, and their orders not only disobeyed, but their own servants concurring in controlling them,—they are naturally infuriated to a high degree, or imbibe a plausible and strong suspicion that a conspiracy is formed against their life, liberty, or property. These are irresistible reasons why insane persons should be removed from home.

Reminiscences, whether agreeable or painful, may be associated with the most insignificant localities, which, when the feelings are morbidly sensitive, and reason cannot correct them, revive certain objects or ideas that powerfully excite or depress the passions. In whatever place an insane person is exposed to the danger of such mental associations, he ought to be removed from it.

In a strange place, attended by those equally strange, and whom he has never been accustomed to command, and confided to the direction of a competent medical attendant, a moral influence over the patient is thereby established, to which he usually readily submits; and a cure then may be expected, which never otherwise can be accomplished.

Unfortunately, separation and seclusion from friends, and confinement in a mad-house, have been considered

as synonymous; and hence any proposal to remove the patient excites alarm and suspicion, perhaps gives offence, and is frequently at once rejected.

We should first explain what separation and seclusion mean. There are three modes: first, secluding the patient in his own house, which can never be complete, for many obvious reasons besides those I have mentioned; second, removing him to an insulated cottage, or convenient lodging, under the care of an attendant or keeper, which is preferable, where the pecuniary means of the patient admit of a plan which is always expensive; and, third, removing him to a respectable asylum, private or public, as may be most suitable, when the desperate nature of the case precludes the possibility of its being managed elsewhere, or pecuniary circumstances cannot afford other accommodation.

In my opinion, a patient in a recent state of insanity should not in the first instance be sent to any asylum, unless the nature of the case, or the circumstances of the party, admit of no alternative. In confirmed insanity, fatuity, &c. such a place is commonly most suitable.

Confinement in an asylum is equally obnoxious, perhaps, to the poor as to the rich; therefore, before the former are consigned to an asylum, the feelings of their family ought, as much as possible, to be respected. But in a well-regulated asylum the middle orders and poor often meet with greater comforts, and those essential requisites to promote recovery, which they have not at home. Real humanity, therefore, in such cases, dictates less delicacy to be observed in respect to confining a lunatic; and, generally, a little reasoning soon convinces his real friends of the truth.

The custom of sending the insane to hospitals seems to have originated in convenience and public safety, rather than with an intention of curing them. We do not meet

with any accounts in ancient authors of hospitals appropriated to mad people. The first appears to have been established in the East. In the year 491 we read of one existing at Jerusalem.* Benjamin of Tudela mentions, that in the twelfth century there was a large building at Bagdad, called Dal Almeraphtan, or House of Grace, in which those who lost their reason were received during the summer, and where they were kept in chains till they recovered. This house was visited every month by the magistrates, who examined the state of the patients, and released those who were well.†

In the same century, hospitals for the sick and the insane were founded, according to Anna Commenes, by her father, the emperor Alexius.

Among the Moors, by whom medicine was once studied as a science, and hospitals were every where established, asylums for the insane were also common. There is still at Faz or Fez, a muriston, or mad-house,‡ where the poor patients are chained down, and treated, probably, as cruelly as the lunatics were in the Timarahane at Constantinople, in the sixteenth century.§

Perhaps the oldest hospital for lunatics now in Christian Europe is Bethlem, which was founded for the cure of lunatics in 1547.

They are now numerous in most countries. Many, we learn from the descriptions of them, are excellent. From various causes, on which I have already cursorily touched, it appears that all the public, and most of the private asylums in the United Kingdom, are much improved; and in many of them all the means which science and humanity suggest are successfully resorted to for the cure of the patients.

* Ueber Die Einsamkeit, Leipz. 1784.

† Itinerarium, Lugd. Bat. 1633.

‡ Jackson's Account of Morocco, p. 131.

§ Haslam's Observ. p. 286.

The objections, therefore, which formerly might be reasonably urged against sending a patient to such places rarely now apply; and where the case seems to require that kind of separation, it ought with more readiness to be resorted to.

A very nice and important question arises when seclusion of an insane person has been carried into effect; and that is, the nature, if any, of the intercourse with his friends which may be permitted. No rule can be laid down in this respect. It must be left to the experience and discretion of the medical attendant. In some cases no mischief may arise from reasonable intercourse; others admit of it in a partial degree; in others, the slightest of any kind is decidedly injurious.

I have known the sight of the hand-writing, so also of a garment, ornament, book, or any trifle, of a beloved, or respected, or detested object, destroy in a moment the most marked proofs of amendment; and the same effect will sometimes be produced from merely mentioning persons or things with which there was a morbid association of ideas.

There is a source of keeping up these morbid associations in the minds of lunatics which often protracts and perhaps defeats recovery, and which is sometimes little suspected. This source is the physician himself. The medical attendant is frequently, especially in the country, esteemed by families not only as a professional character, but as a confidential friend. When known in that light by a lunatic, the same morbid association with home, or members of his family, or domestic circumstance, is as positively revived by his visit, as by that of any other friend.

Medical men, in the course of their attendance on an insane patient, often discover this fact, and feel themselves in consequence compelled to cease their visits.

One of the most painful duties of the physician is

the repressing of the importunities of the patient himself, and also of his relations and friends, to allow of communication. When convinced that it will be detrimental, resistance to such communication should be carried to the utmost point, and should be yielded only when importunity on the part of those who have authority assumes the character of command. In yielding, contrary to his judgment, the physician should distinctly throw all responsibility on the applicant; otherwise, the consequence, if injurious, will certainly be cast on him.

When allowed to follow my own course, before I permit the visit of any individual, I examine the state of the patient's feelings and views towards that person. Moreover, I always select the one who the least interests the patient's affections, for the first interview. If that is borne without ill effect, I next fix on one who is nearer, and reserve, as the last trial, communication with the object of warmest attachment.

Proceeding in this cautious way, the mind too sensitive or too enfeebled by recent suffering is gradually brought to bear a renewal of intercourse with long-lost friends, without being too much moved.

Frequently, however, all the sagacity of the physician is deceived by the art and dissimulation of the patient, who will assume an appearance of amendment merely to obtain an interview with a friend; his only object in seeking it being to request his release, or perhaps to make accusations respecting his treatment.

Should the mental derangement have proceeded from habitual intemperance, a longer confinement after convalescence is obviously required than from any other cause; for the more it is protracted, the greater is the probability of that habit being obliterated, and the permanency of recovery.

Suspicious and sensitive as the public mind is respecting separation and seclusion of the insane, I lament

when any case occurs that seems to militate against this most important part of their moral treatment.

I have, therefore, always felt much regret at the publication of a case by Dr. Gooch, of an insane lady who recovered, as it was supposed, from the effect of a visit which her husband paid her, contrary to the advice of her medical attendants. It will be conceding nothing more than must be granted in the curative treatment of all diseases, that remedies sometimes act contrary to the expectations of the wisest. An exception does not disprove a general rule. Nor is this case a justification of departing from the inductions of experience.

It appears that this lady fancied her husband was dead, and that his spirit haunted her. As soon as evening closed, she would station herself at a window, and fix her eyes on a white post that could be seen in the dusk ; and this she imagined was his ghost.

Now it is obvious, that such being her delusion, either she ought not to have been indulged by being allowed to stand at that window, or the post, the object of morbid association and delusion, ought to have been screened or removed.

Where an error of the imagination like this exists, and is persisted in, I would have tried the experiment, and permitted an interview with the husband. To withhold it in this case was, perhaps, injudicious.

I am certain that the talented physician who relates this case never meant to inculcate, that intercourse with the insane was to be encouraged from the result of any individual case. Neither his own judgment, nor that of his colleague in attendance in this instance, advised the husband's visit, or anticipated such an effect from it. It cannot, therefore, be adduced as an example for imitation.

Yet, such has been the impression made by the recital of this case, that I know Dr. Gooch has been consulted

in several cases of insanity, from an opinion that he would not countenance the removal of an insane patient from home; and farther, when I have recommended separation, this very case has several times been quoted in opposition to it.

I am ready to own that I have not always been right in my judgment, and that sometimes no harm has followed from a visit when I fully expected it. But this does not alter my opinion, that, as a general maxim, it is wise to deny intercourse between the patient and his friends, except under the circumstances and restrictions which I have pointed out.

COMMENTARY VII.

EXERCISE, OCCUPATION, AND AMUSEMENTS.

INACTIVITY debilitates the powers of body and mind — due exercise strengthens both.

Muscular exertion increases the momentum of the blood in proportion to the degree used, and, provided it be judiciously regulated, tends to restore the balance of the circulation when that is disturbed. Hence, exercise is peculiarly appropriate for the insane.

The impetus of the blood may also be accelerated by other causes; such as mental emotions, heat, wine, full ingestion, &c. But the effect of exercise and of such stimulants on the corporeal functions differs very essentially: the one, at the same time it acts on the arteries, and propels the blood into the veins, carries off a great portion of it by the exhalants in perspiration; the others stimulate the arterial system, while the venous is comparatively dormant.

Whenever, therefore, the circulation is already excited to an extraordinary degree, as it is in most recent cases of mania, violent muscular exercise would only increase the malady. Moderate exercise only is applicable in such cases; while for those in whom the momentum is reduced, or is languid, or unequal, the more violent and brisk is required.

Exercise, constant exercise, is advised for the insane. But I must insist, that unless a judicious limitation be observed, the malady of some will be greatly aggravated by it.

Constipation, in extreme cases of mania and melancholia, does not always proceed from indifference to the calls of nature or want of attention. It may arise from other and opposite causes, viz. over excitement, and defective excitement: too much cerebral activity may impair the influence of the nerves, and impede the peristaltic motion; too little may render the liver inert, and the bile inadequate to stimulate the bowels to action. As the effect of moderate exercise is to quicken the circulation, the peristaltic action then becomes uniform, and secretion and excretion are duly performed. Exercise, therefore, for insane persons ought to be varied according to the form of the malady.

Thus, for such patients as are easily excited, swinging, riding in a carriage or gently on horseback, or slowly walking in quiet shady places, will, under certain restrictions and modifications, be sufficient and beneficial; while for those in whom the circulation is languid and sluggish, active exercises, and every degree or kind of muscular exertion they can use, will conduce more to their health.

A due medium, therefore, in the exercises of insane persons should always be preserved; for if carried to excess in either case, greater excitation, or so much fatigue and exhaustion, is produced, that harm, instead of good, will result.

It cannot be necessary to point out particular species of active exercise suitable to the insane. With the cautions premised none can be objectionable.

Occupations and amusements are used almost synonymously; but they differ materially, though equally essential as exercise to recovery: it is fortunate when they can be combined.

Each should be suited as much as possible to the rank and taste of the patients. A man of refined education would find exercise and occupation in digging, but no

diversion of his morbid ideas—a peasant might find both, and amusement also, in this pursuit. The latter would pass through beautiful scenery, or see a fine picture, statue, &c. without his attention being attracted; the former might be enchanted by such objects, and completely, for the time, forget his illusions.

Again; occupation, like amusements, must be varied. The same course long continued becomes wearisome and disgusting. A little thought and ingenuity, where the means and a proper inclination on the part of a superintendent exist, can wonderfully diversify these auxiliaries to the powers of medicine, in promoting the cure of insanity.

No public lunatic asylum, especially those for paupers, should be without a garden or land annexed, proportionate to the number of patients. Some lunatics have a taste, or will readily employ themselves in horticulture, some are passionately fond of raising flowers, others will apply to the ordinary labour of agriculture.

Asylums in manufacturing have an advantage over those situated in agricultural districts, for the majority of lunatics may be made to follow their several callings. Such occupations not only tend to the amelioration of the patients' state, but to diminish the expense of keeping them.

In this respect the Wakefield asylum has a great advantage, for the patients manufacture all the materials for making their apparel, and the surplus is sold and carried to account.

In La Salpêtrière, the insane women are permitted to sell a part of the produce of their needle, or other ingenious works, and to appropriate it towards the relief of their necessitous families. There is a double benefit in this plan; for it not only employs them, but is an incentive to industry. Female lunatics, however, can often be employed advantageously where males cannot.

Most lunatics are disinclined to work; but kind entreaties, or the prospect of its procuring themselves the means of extra comforts, will frequently tempt them to do something.

The greatest difficulty is to find occupation or amusement for the higher classes of lunatics. They sooner get tired of the same pursuit. Reading, billiards, chess, cards, and other games, must be diversified for in-door—walking, bowls, gardening, and athletic exercises, for out-door—amusement.

Some have been afraid to trust working implements in the hands of lunatics, lest they should convert them into weapons of offence. But the fear is unfounded, as is proved by the rarity of any accident. Dangerous lunatics, of course, are never allowed so much liberty.

Sometimes the taste or inclination of the patient leads to study or sedentary pursuits. It should be remembered, that the exercise of the mind is in itself a certain stimulant, and must not be indulged to excess; consequently, such employment should not be encouraged to the neglect of bodily exertion.

Many would, if permitted, find ample amusement in their pen. But this can seldom be allowed; for it is too apt to run in the sense of their delirium or delusion: in this way the fanatic inevitably multiplies and fosters his inspirations, the poet at length raves, and the projector becomes more wild and speculative.

Music has not only been highly extolled as an amusement for the insane, but as a powerful means of cure.

Experience and sober reflection instruct us, that music, like every thing else that powerfully affects the passions, is relatively good or bad in every case of insanity. Among a musical people, such as the Italians or Germans, it would be more generally applicable and useful than among a people like the English, who are not musical. But there are lunatics in all countries to whom

music is discord and misery ; some are perfectly insensible to it ; and others on whom it produces the best effects.

We must, therefore, as in respect to every moral remedy, first ascertain the disposition as well as the peculiar delusion of each patient, and admit or proscribe music and other amusements and occupations according to their effects.

PART VI.

COMMENTARY I.

MEDICAL EVIDENCE IN CASES OF INSANITY.

MEDICAL jurisprudence, in reference to mental derangement, might appropriately occupy a larger portion of these Commentaries. But the subject has recently been so fully treated on by various eminent writers, that I would rather refer my readers to them,* than swell this already too extended work uselessly.

There is one point, however, which, both as it regards the question of sanity or insanity, and the medical character, demands a few remarks; and that is, on medical evidence in juridical inquiries.

Every medical man, whether the various morbid conditions of the human mind have been his peculiar study or not, is liable to be called upon to give his opinion as a witness on such questions.

In some cases, as in criminal prosecutions, the life or liberty of the accused may depend on his evidence. In others, the property of the party, and the excluding him from the common rights of citizenship, often result from it.

In either case there are two parties: the prosecutors for justice, and the alleged criminal: the petitioners for the commission *de lunatico inquirendo*, and the alleged

* See Paris and Fonblanque on Medical Jurisprudence, 1823. Haslam on Medical Jurisprudence, 1817. J. Gordon Smith's Principles of Forensic Medicine, 1824. Male's Epitome of Juridical or Forensic Medicine, 1818. Also, Tracts by Drs. Johnson, Bartley, and Farr.

lunatic. On both sides counsel are generally employed to assist their respective views.

Lawyers are commonly fond of indulging in metaphysical theories on the nature of the human mind. Unfortunately, all the information they usually possess concerning the forms of derangement to which the mind is subject, is derived from certain great legal authorities, although these authorities themselves have omitted any definition of what constitutes insanity; or perhaps they imbibe their opinions from medical authors as much inclined to theorise as themselves.*

Hence the natural fondness of advocates to involve the question of sanity or insanity in subtleties is encouraged.

Hence, too, in cross-examining a medical witness, they are sure to request a definition of the species of madness with which the party said to be insane is affected.

The jury might be satisfied, though, perhaps, the court would not, with Locke's definition, that "madness is that which is opposed to reason." Too often, however, the physician, either from confidence in his own powers or the vanity of display, falls into the snare; and, in the attempt at a clear explanation of the nature of that which no one knows, he loses himself, and becomes perfectly unintelligible. This is exactly what the counsel desires.

I have endeavoured to shew (Part II. Com. I.) the futility of every definition hitherto offered of the morbid conditions of the mind, even in the most ordinary forms

* A striking illustration occurred in a recent commission held at Nottingham, on the Reverend — Holmes. Both the counsel and medical witnesses so mystified the court and jury with metaphysical speculations and nice distinctions respecting the human mind, that a verdict was received and recorded so happily imitative of the Rev. Gentleman's intellectual state, that the conclusion preceded the premises! Thus stultifying the result of their investigation, and nullifying the commission.

which occur; and it is my further object, by referring to those observations, to guard the profession from attempting any specific definition of insanity; for the certain consequence is to render their testimony ridiculous.

I own that I have felt something akin to shame, when I have heard men of education not only delivering the most conflicting testimony, but supporting distinctions in insanity that never had existence except in their own inventive imaginations.

Having been employed in most of the important legal inquiries into the mental competency of individuals which have occurred of late years, and where a host of medical witnesses has been arrayed on one or the other side, I may safely refer to any of those inquisitions for the justness of my remarks and the necessity of more caution.

The truth is, that the advocate cares not a straw for the definition; but in proportion as the testimony is clear and pointed against his client, so is he anxious to involve the witness in this labyrinth, in order to shake the effect which his evidence will otherwise produce on the jury. And, further, if it suit his purpose, counsel will not hesitate to employ any *ruse* that may throw ridicule on the witness, and thus endeavour to turn aside the force of his evidence. The one predicament is more easy for a medical witness to avoid than the other. It is his own fault if he be entrapped into giving elaborate and fanciful descriptions of the state of his patient's mind; but he cannot always be guarded against legal subtlety, when an advocate is determined to exercise the privilege he possesses, of perverting or disguising facts that make against his cause.*

* I once experienced such an attack; and in a manner not only very painful to my feelings, but, as it occurred on an important traverse (the King *versus* Hibbert), in a crowded court, I had no opportunity then, or afterwards, of repelling the effect by an explanation through

As no definition of any form of insanity, by the most learned nosologists, has been free from objection, no discredit can attach to any witness for declining to attempt

the same channel. The consequence was, that it did me, temporarily, much professional injury. The occasion was this :—

Under an order of Lord Chancellor Eldon, I was employed to examine into the state of mind of Thomas Hibbert, Esq. As he was represented to possess an income of 25,000*l.* per annum, I thought it right to ascertain his knowledge of arithmetic, judging that he could not be competent to manage his own affairs, if ignorant of its first elements. Accordingly, I gave him several simple sums in addition, division, and subtraction, to work.

When I was examined in court, I exhibited the paper on which these several sums were set, and Mr. Hibbert's manner of executing them.

The defendant's counsel, in summing up the evidence which had been given, inquired, at the same time pointing to me, who sat in a very conspicuous place in court, what credit was due to a witness's testimony who shewed so much ignorance, that he could not spell correctly what he had placed before the defendant, whose competency he pretended to examine? He then referred to the paper which I had produced, stating, that the word which ought to be written "subtraction," I had spelt "substraction."

A violent laugh was raised at my expense. I had afterwards, however, the satisfaction of ascertaining that the artifice had no effect either on the learned judge or the jury.

Feeling perfectly conscious that the observation of the learned counsel was founded in his own error, and not in mine, and knowing that no man at the bar was more distinguished for gentlemanly manners as well as talent, I addressed the following letter to him, to which I shall append his reply :—

SIR,

February 26, 1821.

In commenting upon my evidence given in the trial the King *versus* Hibbert, you made an attempt to obviate its effect, by asserting that it was worth nothing, because I had betrayed my own want of capacity, in writing, on the paper of figures I had placed before Mr. Hibbert, *substraction*, instead of subtraction.

I was certainly as much confounded at the accusation, as surprised at its application; and for the moment surrendered my judgment to the

it. Besides, it is contrary to the principles of evidence to put a question which involves an hypothesis ; and

confident manner in which it was advanced by a person of your great talents and learning.

Reflection, however, convinced me that I had valid, if not classic, authority for my orthography. I take the liberty, therefore, of referring you to any English lexicographer, and you will there find, that subtraction is the original word in the English language, that it is still used in common parlance, and in arithmetic very commonly.

Even had I committed the error you, Sir, have alleged, the exposure could not have served your cause. What, then, can justify an endeavour to stultify an individual who, like yourself, is a member, and I hope not an unworthy one, of an honourable and useful profession, to whom, also, as to yourself, character is every thing ; and who was brought into court, not as a volunteer witness, or as a party interested, but simply in the discharge of a professional duty ?

As to a gentleman, therefore, I appeal to you, in the full confidence that, when you learn the open injustice you have done me, you will at least acknowledge that I have not merited it.

I have the honour to be, Sir,

Your obedient servant,

G. M. BURROWS.

SIR,

March 1, 1821.

I extremely regret that any thing should have occurred upon the recent trial in the King's Bench to occasion you a moment's uneasiness ; but I really have been quite misunderstood. I never meant to contend, that a mistake in spelling a word, or casting an account, could be considered as proof of a want of capacity or talent ; for in so doing, I should have been guilty of the absurdity of pronouncing sentence against persons the most eminent in literature and science. My reasoning, in fact, was directly the reverse. I contended, that no such inference could fairly be drawn from mistakes to which even men the most distinguished, and the most cultivated by education (as evinced in your own case), might be occasionally liable. Whether, as to the word in question, any mistake has been committed, must be for the etymologist to determine.

I have the honour to be, Sir,

Your most obedient servant,

To DR. BURROWS.

such every definition of insanity is. On this ground it may always with propriety be objected to.

The fact of sanity or insanity is all that should be expected from a medical witness; and no one ought to appear in court if he entertain a doubt one way or the other. If, although in doubt, he have been compelled to appear as a witness, he should at once declare it. On the contrary, if he feel confident in his judgment, he should be prepared not only to give his opinion in a straight-forward way, but also his reasons in support of it.

He may be able to speak only to the existence of one or more delusions, from conversing with the lunatic. That is good evidence as far as it goes. But as a lunatic, generally, shews the existence of his delusion by some correspondent act, it will make his testimony more conclusive if the witness can also make the act which is connected with the delusion appear.

This being obtained, the jurisconsult might be content; but as his object is to perplex the senses of the jury, he seldom cares how much he involves and exposes the medical witness.

Having observed many successful attempts of this kind, I long since determined to resist being inveigled into any definition of insanity, whether required incidentally by the court, or purposely by counsel. Accordingly, when giving evidence on a recent commission,* and I was asked to define unsoundness of mind, I respectfully, but decidedly declined it, on the avowed ground that "I had heard the question frequently put to medical men of the greatest eminence, and never heard any one of them, by his explanation, make the subject at all clearer." And I advise medical men to follow this ex-

* See Evidence in a Commission *de lunatico inquirendo* on the Rev. Edward Frank.

ample when called as witnesses, if they wish that their testimony should be respected.

The interests of justice will be much more strictly promoted by pursuing such a course, than by surrendering their own judgment to others.

A medical witness should certainly be rather diffident than forward in giving his evidence in cases of disputed insanity. If too confident, he will be immediately, and not perhaps improperly, suspected of being a partisan, and having a stronger interest in the event than meets the eye. He should, therefore, shape his conduct and speech equally to avoid shewing that degree of diffidence which betrays ignorance, and that degree of earnestness which evinces a feeling beyond the exercise of a mere professional office.

In doubtful cases, it often happens that counsel themselves are obliged to consult, and be guided, in a certain degree, by medical opinion, even when the cause is in course of trial.

The medical adviser even in that case is generally accused of becoming a partisan, although perhaps he is simply performing his duty. However undeserved the reproach, it cannot be avoided.

Medical men are also often blamed, by the unreflecting and prejudiced, for examining the state of a person's mind suspected of being insane, under an assumed rather than in their medical capacity. This is a most absurd aspersion. If a delusion really exist which prompts a lunatic to acts that expose himself, or others, or his property, or society, to hazard, whether the object be to place him in safety for his cure, or under the protection of the Great Seal by a commission, any means by which the detection of the delusion can be effected, are not only justifiable, but imperative on the medical inquirer. If delusion can be discovered, the person suspected, and his family, are benefited by an examination which has

been conducted in a manner best adapted for ascertaining the fact.

Supported by the integrity of his intention, and the consciousness that his judgment of a case is founded on mature examination and reflection, a medical man should candidly state his opinions. He is not, like an advocate, bound to support a cause contrary to his conviction.

There is nothing to fear while actuated only by honourable motives. It is only when there is a deviation from those principles that he has to dread what he deserves — exposure and disgrace.

THE END.

LONDON :

J. MOYES, TOOK'S COURT, CHANCERY LANE.

